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The value of cultural institutions

Measurement and description

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PhD thesis

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To my brother Maximilian

Abstract

Resources are invested to maintain cultural institutions and society has an interest in the efficient allocation of these resources. To understand efficiency, the costs incurred in monetary units need to be compared to the value created. The overall question of this thesis is: *What is the value of cultural institutions?* The question is divided in two thematic topics. The first concerns, how to *measure* the value of cultural institutions in monetary units? This topic is studied in three articles. Revealed and stated preference methods are applied. The second thematic question concerns how to *describe* the measured value? Two other articles investigate how individuals perceive the value of cultural institutions.

The articles are based on survey data from 12 samples and more than 3500 interviews. The first article is based on a licentiate thesis: *Valuing the Invaluable - The Value of Cultural Institutions* (Armbrecht, 2009) and applies the contingent valuation method to measure the value of a concert hall and museum. The second article compares a stated preference method (contingent valuation method) with a revealed preference method (travel cost method). The third article applies contingent valuation method and the concepts of use and non-use value to a festival setting. The fourth article is based on interviews and aims to gain an understanding of how individuals perceive and describe the value of cultural institutions. The fifth article develops a scale for measuring the aspects of cultural institutions perceived by individuals to be valuable.

The articles indicate that the value created for the three study objects (a museum, a concert hall and a festival) exceeds the costs they incur. The results seem to be reasonable and prove to be valid when compared to the results of the travel cost method as well as real-market comparisons. A methodological advantage of contingent valuation method is the possibility to distinguish between different types of use and non-use values. Contrary to the hypothetical character of contingent valuation method, the travel cost method is based on observed behaviour. Though this involves certain pedagogical advantages, the method may not be suitable for assessing non-use values or distinguishing different types of use values.

The fourth article describes the relationship of concepts used in economic literature to those in other disciplines. The former may not encompass all benefits, but it does cover a variety of social, cultural, health related, educational, and other values. The last article develops a scale as an alternative method for measuring the perceived contribution of cultural institutions. The thesis concludes that use and non-use values need consideration when assessing the value of cultural institutions. Besides monetary descriptions of value, scales are applicable for understanding which factors determine the value of cultural institutions.

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Göteborg, West Coast, in November 2012

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1. Introduction

Individuals perceive art museums, concert halls, opera houses and festivals as valuable, but the maintenance of cultural institutions also demands resources. Society has an interest in the efficient allocation of resources, in order to increase the value perceived by individuals, and thus welfare. Assessments of efficiency refer to the relationship between input and output. This is the core of cost-benefit analysis, which is a method to compare costs and benefits and to assess changes in welfare. The costs of cultural institutions are readily available in terms of monetary units but created value is frequently described in other than monetary terms. To assess changes in welfare, there is, however, also a need to assess and understand the value created. The overall question is therefore: *What is the value of cultural institutions?* The question is further divided into the two thematic questions elaborated below.

Assessments of value involve measurement. The value of culture is multidimensional and complex, while measurement aims to bring value down to one measurable unit (Hutter & Throsby, 2008). In a preceding licentiate thesis (Armbrecht, 2009), methods for measuring the value of two cultural institutions in monetary units were applied. The value of the cultural institutions thus became comparable to the financial costs they incurred. However, the application of these methods also yielded further methodological challenges, motivating the first thematic question: *How to measure the perceived value of cultural institutions?*

To understand the value created by cultural institutions, environmental concepts have served as guidance, and it has been assumed that these are directly transferable to a cultural context, and empirical analyses of the content of adapted concepts have been rare. However, individuals may perceive a value for many reasons. Consumption of experiences may create value, through fantasies, feelings, and fun (Holbrook & Hirschman, 1982). Furthermore, cultural institutions create value through image, social cohesion and identity (Throsby, 2001, 2010). To understand the value of cultural institutions, the value perceived by individuals needs to be described and understood. The second thematic question is therefore: *How to describe the perceived value of cultural institutions?*

The objective of this thesis project is to investigate the value of cultural institutions, by measuring the value of cultural institutions in Sweden, and by describing the value of cultural institutions as perceived by individuals.

1.1 Disposition

The first part of this thesis (chapter 1-6), provides an overview of the theoretical and methodological foundations and suggests a structure for understanding the relationship between the five articles included in this thesis project. Each article addresses one of the five research questions. The first three articles investigate the *measurement* of value, and can be summarized under the thematic question: *How to measure the perceived value of cultural institutions?* The two subsequent articles consider how to *describe* the measured value, and address the thematic question: *How to describe the perceived value of cultural institutions?*

Table 1: An overview of the articles included in this thesis related to each of the thematic questions

	Title	Authors	Methodology	Published
Measurement	(1) Culture and value creation: An economic analysis of Vara Concert Hall and the Nordic Watercolour Museum	John Armbrecht & Tommy D. Andersson	Quantitative survey, contingent valuation method	In press at Routledge
	(2) The Value of Cultural Experiences: Estimations of Use values	John Armbrecht	Quantitative survey, travel cost and contingent valuation method	To be submitted
	(3) Estimating Use and Non-Use Values of a Music Festival	Tommy D. Andersson, John Armbrecht & Erik Lundberg*	Quantitative survey, contingent valuation method	Published in Scandinavian Journal of Hospitality and Tourism
Description	(4) The Value of Cultural Institutions: A Review and Conceptual Development of Value Categories	John Armbrecht	Qualitative interviews	To be submitted
	(5) Developing a scale for measuring the perceived value of cultural institutions	John Armbrecht	Quantitative survey, exploratory and confirmatory factor analysis	To be submitted

*the authors recognize equal contribution.

In what follows, section 1.2 sets the stage and defines the two major concepts: *cultural institutions* and *value*. Thereafter, three research questions related to *measurement* are developed in Chapter 2. Chapter 3 develops two research questions related to *description* while Chapter 4 describes the *methodology* used to collect the data for the studies. Chapter 5 presents a *summary and conclusions* for each article. Chapter 6, first, offers conclusions on how the value of cultural institutions can be measured and, then, continues with conclusions on how to describe the value, and ends with some overall conclusions and reflections on the value of cultural institutions.

1.2 Setting the stage: defining major concepts

Culture has different, yet interrelated, meanings and the concepts of culture and cultural institutions therefore need clarification. Similarly, value is a central concept in many disciplines. Explaining and defining how cultural institutions and value will be used in this thesis project is the intent of the following section.

Culture and cultural institutions

From an anthropological and sociological perspective, culture embraces the attitudes, beliefs, values and codes of practice shared by a group. Casson (2009) describes culture "as shared values and beliefs relating to fundamental issues, together with the forms in which they are expressed" (p. 363).

In cultural economics, as an economic sub-discipline, culture is often used in a narrower, functional sense, to designate cultural activities' goods and services. The 'fine arts' in particular are covered by this description and are sometimes referred to as 'serious culture'. Nevertheless, architecture, music, sculpture, and creative writing may also be included in such a functional concept. To characterise cultural goods and services, Throsby (2009) proposes six characteristics:

- *Cultural goods are experience goods, the taste for which grows as they are consumed in greater quantities; they are therefore subject to rational addiction;*
- *Cultural goods have some public-good properties; in aggregate they yield positive externalities or diffused benefits that may be demanded in their own right;*
- *Cultural goods result from production processes in which human creativity is an important input;*
- *Cultural goods are the vehicles for symbolic messages to those who consume them, i.e. they are more than simply utilitarian but serve in addition some larger communicative purpose;*
- *Cultural goods contain, at least potentially, some intellectual property that is attributable to the individual or group producing the good; and*
- *Cultural goods embody or give rise to forms of value that are not fully expressible in monetary terms and that may not be revealed in either real or contingent markets.* (Throsby, 2009 p.7)

The proposed characteristics are illuminating, insofar as they describe cultural goods and services. However, the description is broad and, for the purpose of this thesis project, a limitation is applied to organizations that provide cultural goods and services. Examples include cultural institutions such as opera houses, theatres and art museums. *Cultural institutions are defined as organizations where practices and habits result in the production, distribution and consumption of cultural goods and services.* While there are

exceptions, cultural institutions are mainly non-profit organizations (Baumol & Bowen, 1993; Weisbrod, 1977).

Value

Hutter and Throsby (2008) state that some researchers may claim the existence of absolute or intrinsic value. Such a conception implies that "values are intrinsic or objective in the sense that they are independent of individual preferences" (McCain, 2009, p. 150). Similarly, van den Braembussche (1996) suggests that a cultural good or service may be "desirable or worthy of esteem for its own sake; thing or quality having INTRINSIC worth" (p. 35). This means value is not determined by individual preferences and it also has an independent existence from the evaluation of experts. This understanding is not compatible with a perspective of value as applied here.

From an economic perspective, value is related to the concept of utility. Bentham (2000) describes the meaning of utility as the "property in any object, whereby it tends to produce benefit, advantage, pleasure, good, or happiness" (p. 14). This description of utility is also referred to as *experienced utility* (Kahneman, 2000). Bentham's (2000) conception, initially published in 1781, shifted towards a consumer-oriented perspective, i.e. utility represented the benefits and pleasure that individuals derive from consuming services and products. Utility is thus used to explain choices and may be labelled *decision utility* (Kahneman, 2000). Decision utility represents aspects that influence individuals' satisfaction and can explain choices individuals make. According to Hanley and Barbier (2009), positive and negative changes in utility are referred to as benefits and costs that lead to the formation of value. Usually benefits and costs are measured in cardinal utility and often in monetary metrics (Mitchell & Carson, 1989), and may reveal something about changes in a society's state of welfare (Garrod & Willis, 2001).

In this study, the concept of value will be used to refer to utility, as is often the case. *Value may include positive and negative perceptions and can be understood as a function of both positive and negative perceptions.* On an individual level, the perceived value is reflected by an individual's willingness to pay to obtain the good or service. On an aggregated level, value is represented by the area under the demand curve. Both individual and aggregated value therefore may be measured in monetary units (Arrow et al., 1993; Mitchell & Carson, 1989).

2. Measuring the value of cultural institutions

The first thematic question concerns: *How to measure the perceived value of cultural institutions?* A cost-benefit framework, with stated and/or revealed preference methods, takes a holistic perspective in order to assess *all* major impacts for *all* members of a society (Hanley, Spash, & Cullen, 1993). Cost-benefit analysis aims to assess the efficient allocation of resources and changes in welfare and is based on a number of assumptions such as: Individuals are assumed to be confronted with a number of choices, for which they have preferences, and individuals strive to maximize their overall utility (Mitchell & Carson, 1989). Every individual is the best judge of his or her preferences. The aim is primarily to describe efficiency rather than distributional issues. It is the nature of most policy decisions that some citizens will benefit whereas others may be worse off. To measure the welfare contribution of actions, Hicks (1939) and Kaldor (1939) introduced a test to assess whether the benefits would be large enough hypothetically to compensate for the costs. Thereby the net-benefit is estimated. If the net-benefit is positive, the action can be assumed to improve welfare.

To measure the value of cultural institutions, all the members of society who could possibly be affected by its provision need to be accounted for. Whereas the consumer value (use value) of actions in well-functioning markets may be assessed, e.g. by price, values that arise despite any use are more difficult to measure (non-use value). In this chapter, the concepts of use and non-use value are introduced to describe the value of cultural institutions.

2.1 Use and non-use values

The experiential value, which cultural institutions create for consumers, may be conceptualized as *use value*. Based on the seminal work of John Krutilla (1967), Mitchell and Carson (1989) describe use value as representing the value of all direct and indirect ways in which an agent uses a good or a service. In a cultural setting, direct use value may consist of the value created by the core cultural activity, for example a museum exhibition or a theatre play. Indirect use value includes the value of additional related experiences. Having a pleasant dinner, chatting with friends, or spending time in the bar attached to a cultural institution, may create indirect use value.

While use value, in terms of experience, is one important contribution, the value of cultural institutions also needs to include the gains that are not attributable to use. The value that cultural institutions have, irrespective of any use, is referred to as *non-use value*. This concept may incorporate any social, cultural, economic, environmental, or other values (Krutilla, 1967). Individuals, for example, may attach value to the possibility of visiting a museum some day, even though they have not yet done so, and may never get around doing so. This value is referred to as *option value*. A museum may also be considered valuable, because it represents the possibility of handing down experiences to future generations. Furthermore, individuals may place value on bequeathing a culturally rich society to future generations. This value is referred to as *bequest value*. The benefit that people derive from the mere *existence* of an institution, such as an art museum – i.e. the satisfaction in knowing it is there as an element in the cultural landscape, whether the individual actually visits the institution or not, is referred to as the *existence value*. Andersson, Armbrrecht and Lundberg (2012) propose categorizing the value of cultural institutions as shown in figure 1.

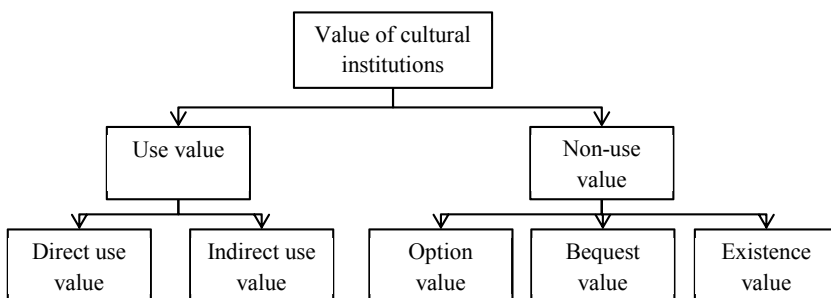


Figure 1: The value of cultural institutions (cf. Bateman and Langford, 1997; Frey, 2003; and Throsby, 2010)

2.2 Stated and revealed preference techniques

Cultural institutions create use and non-use values which makes the measurement of value, by observing market prices, difficult (Li, Lofgren, & Hanemann, 1996). Non-market valuation techniques are necessary. These are divided into two different approaches: revealed and stated preference methods (Garrod & Willis, 2001; Kahneman, Knetsch, & Thaler, 1990; Mitchell & Carson, 1989). The former approach is based on observable

behaviour, whereas the latter method is hypothetical, based on stated or 'expressed' preferences (Garrod & Willis, 2001).

The travel cost method is one revealed preference technique for measuring value. It measures value by means of the travel costs individuals will accept in order to access an experience (Clawson & Knetsch, 1966). The hedonic price method, another revealed preference method, postulates that some goods and services traded on the market might reflect the value of a cultural institution. The hedonic price method uses, for example, housing prices as an intermediate to assess the value and it assumes that, while housing offers shelter, the quality of shelter may vary depending on its location in relation to cultural institutions. Therefore, the costs of housing may depend on the distance to cultural institutions (Rosen, 1974).

Stated preference methods directly ask individuals about their preferences with respect to goods and services, by means of open-ended questions or closed-ended questions (Garrod & Willis, 2001). Open-ended questions give respondents an opportunity to state 'freely' their willingness-to-pay. Closed ended questions do not allow respondents to state their willingness-to-pay freely, but offers a pre-defined amount that may be accepted or rejected by the respondent. Closed ended questions include dichotomous choice, suggesting to the respondent a randomly chosen willingness-to-pay amount, which the respondent accepts or not. Another alternative of closed-ended questions are bidding games, which are constructed to offer ever increasing or decreasing willingness-to-pay amounts, until an offered amount is not accepted anymore. Choice experiments are a derivative of contingent valuation method (Mourato & Mazzanti, 2002), aiming to value specific characteristics of goods and services. By offering different scenarios, choice modelling allows conclusions about trade-offs and the marginal willingness-to-pay for each characteristic (Adamowicz, Boxall, Williams, & Louviere, 1998; Garrod & Willis, 2001; Tuan & Navrud, 2007).

Willingness-to-accept is used occasionally as an alternative technique for measuring willingness-to-pay (Mitchell & Carson, 1989). The conceptual differences between these methods have been analysed theoretically (Hanemann, 1991; Randall & Stoll, 1983) as well as through empirical applications (Andersson, Rustad, & Solberg, 2004; Kling, Revier, & Sable, 2004; Li et al., 1996). In many studies the willingness-to-accept amount turns out to be substantially larger than the willingness-to-pay amount (Andersson et al., 2004; Kahneman et al., 1990), which is supported by the meta-analytic study of Horowitz and McConnell (1981).

2.3 Contingent valuation method

The contingent valuation method is used to measure the value of public goods because, individuals may not be able to reveal their preferences in a real market properly (Bateman & Willis, 2001; Carson et al., 1998; Garrod & Willis, 2001; Mitchell & Carson, 1989). Ciriacy-Wantrup (1947) was early to ponder about how to measure the value of such resources, but Davis (1963) is considered to be the first to suggest the contingent valuation method as a non-market valuation technique for outdoor recreation. Ever since, the contingent valuation method has developed from being a tool for environmental valuation to become a method applicable in other areas, such as health care (Drummond, 2005), transportation (Alberini & Longo, 2006), food (Andersson & Mossberg, 2004), events (Andersson, 1985; Andersson, Larson, & Mossberg, 2009) and cultural economics (Noonan, 2003).

The method constructs a hypothetical market in which individuals reveal their preferences for a good or service (Garrod & Willis, 2001; Mmopelwa, Kgathi, & Molefhe, 2007), and is attached with strict methodological requirements, specified by the National Oceanic and Atmospheric Administration (Arrow et al., 1993). The methodological implementation criteria have been summarized in numerous handbooks and research articles (e.g. Alberini & Kahn, 2006). They include among other: 1) A clear description of the circumstances under which the respondent is able to hypothetically obtain the specific good or services. 2) Questions deemed to reveal individuals' willingness-to-pay for a good or service. 3) Questions on the socioeconomic background of respondents (Carson, 2000).

Contingent valuation is a scenario method, meaning individuals make their valuation contingent on a specific scenario. Often, the scenario is hypothetical in character, which may threaten the reliability of the method (Cummings, Elliott, Harrison, & Murphy, 1997; Cummings, Harrison, & Rutström, 1995). Studies have shown that respondents in a hypothetical market may state a higher or lower willingness-to-pay than in a real situation. Empirical applications have also shown that the information provided, during willingness-to-pay studies, is likely to alter estimates positively or negatively (Bergstrom, Stoll, & Randall, 1990). Mitchell and Carson (1989) observe that the better informed an individual is, the better the estimate will be (Venkatachalam, 2004; Whittington, Lauria, & Mu, 1991). Research has shown, that if no alternative scenarios are offered during the interview, the estimated value is likely to be overstated (Whitehead & Blomquist, 1991).

Another challenge is the strategic behaviour of respondents, namely free-riding or overpledging (Mitchell & Carson, 1989). Free-riding refers to the situation where respondents intentionally bid lower than their actual willingness-to-pay (Samuelson, 1954). Overpledging, refers to the opposite phenomenon.

Several researchers point out that embedding effects cause problems when trying to disentangle one good from the context in which it is embedded (Arrow et al., 1993; Bateman & Langford, 1997; Kahneman & Knetsch, 1992). For example, respondents may have difficulties in expressing their preferences for one of three stages in an opera house. Assessing the value of the opera house as an entity may be easier. Difficulties may also arise when trying to separate the opera house from other arts activities in the municipality.

Another possible source of error is referred to as sequencing error (Cummings, Brookshire, & Schulze, 1986; Venkatachalam, 2004). This occurs if more than one good is valued and the sequence in which the goods are presented affects the value that individuals assign to them. Mitchell and Carson (1989) suggest two alternatives for managing the problem. First, respondents need to be informed about the sequence of objects prior to answering the willingness-to-pay questions. Further, sequencing problems may also be overcome by providing an opportunity to revise bids.

Throsby and Withers (1983) were early users of contingent valuation method for assessing the value of cultural resources. Ever since, numerous applications have contributed to establishing contingent valuation method within cultural economics. Value estimates have been made for historic sites (Rolfe & Windle, 2003), theatres (Bille Hansen, 1997; Lampi & Orth, 2009), events and festivals (Andersson, 1985; Andersson et al., 2012), monuments and landmarks (Kling et al., 2004; Powe & Willis, 1996), broadcasting (Schwer & Daneshvary, 1995), cultural and world heritage (Del Saz Salazar & Montagud Marques, 2005; Kim, Wong, & Cho, 2007; Maddison & Mourato, 2001; Tuan & Navrud, 2008) and museums (Bedate, Herrero, & Sanz, 2009; Bravi, Scarpa, & Sirchia, 2002).

Despite existing methodological problems, research has shown that stated preference methods are relevant for assessing use and non-use values. In a Scandinavian context, the application of stated preference methods, however, is rare, particularly in regards of cultural institutions. Lampi and Orth (2009) applied contingent valuation to predict changes in visitor composition, after the introduction of an entrance fee at a Swedish museum. Bostedt and Lundgren (2010) used contingent valuation to estimate the value of upholding reindeer farming in northern Sweden, as part of Sami cultural heritage. In a Scandinavian context,

Bille Hansen (1997), measured the value of the Royal Theatre in Copenhagen, Denmark, while Navrud and Strand (2002) estimated the value of Nidaros Cathedral in Trondheim, Norway. Attempts to apply the contingent valuation method in Sweden, to assess the value of cultural institutions have not been found. Furthermore, the studies by Bille Hansen (1997) and Navrud and Strand (2002) both focus on major national institutions and no evaluations of cultural institutions with a regional character have been found. While Lampi and Orth (2009) apply contingent valuation in Sweden, a measurement of the value created, in terms of use and non-use value, is not reported in the study. Applying contingent valuation method, to measure the use and non-use values in terms of willingness-to-pay, to two regional cultural institutions in Sweden, will serve to answer the first question:

RQ 1: *What is the value of a cultural institution as measured by the contingent valuation method?*

2.4 Travel-cost method

Revealed preference techniques provide alternative measurement instruments to stated preference techniques, when measuring the value of cultural institutions. The travel cost method was suggested by Hotelling (1947), and developed by Clawson and Knetsch (1966), for assessing the value of environmental resources and recreational sites (Garrod & Willis, 2001; Hanley & Barbier, 2009; Poor & Smith, 2004; Tietenberg & Lewis, 2008). Recently, the technique has also gained popularity in cultural economics, especially regarding cultural heritage (Alberini & Longo, 2006; Bedate, Herrero, & Sanz, 2004; Mayor, Scott, & Tol, 2007; Poor & Smith, 2004; Ruijgrok, 2006). The method is based on the premise that individuals' preferences for experiences can be derived by observing the visitors' travel behaviour. The travel cost method uses the cost for travelling as a surrogate for inferring the benefits of a resource (Bedate et al., 2004; Hanley & Barbier, 2009).

There are two approaches to travel cost method available. The traditional or 'zonal' travel cost method divides a site's surrounding into different zones. Travel costs are analysed according to the zones of origin. This is the preferred approach, when the focus of inquiry is: *What is the non-market value of an experience at a particular cultural institution under current conditions?* (Hanley & Barbier, 2009). The second approach is the random utility site choice model (RUSC), which is used if the focus of inquiry concerns: *the determinants*

of visitors' choice of cultural institution from a group of choice alternatives (Hanley & Barbier, 2009).

One major concern, when conducting travel cost analyses, is how to value the cost of travelling. Travelling takes time and time is scarce. Therefore, the investment in time has an opportunity cost. While wage rate is one alternative for calculating the opportunity cost of time, Smith and Desvousges (1986) argue for using fractions of the wage rate. Another possibility is to use the individuals' perceived cost of time to estimate the travel costs. Not all visitors, however, will perceive travelling as a cost. Some may enjoy driving along beautiful roads to a cultural institution. Apart from time costs, other costs such as vehicle depreciation, fuel costs and ticket costs for public transport need consideration.

One reason for applying the travel cost method, in contrast to contingent valuation method, is its reliance on observable parameters. The travel cost method can be used to solve many problems where there is a bias that threatens the contingent valuation method. Particularly hypothetical bias, that is, when asking a hypothetical question one will receive a hypothetical answer (Bishop & Heberlein, 1979), is resolved.

Like contingent valuation method, the travel cost method has not been applied in a Swedish context to measure the value of cultural institutions. Introducing the method to measure the use value of two cultural institutions in a Swedish context would be a methodological challenge. Furthermore, assessing the convergent reliability of the travel cost and contingent valuation method is made possible by posing the question:

RQ 2: Do contingent valuation method and travel cost method produce the same or at least similar measures of use values?

2.5 Applying the contingent valuation to festivals

Measuring the value of cultural institutions is one step along the path to understanding the value of culture. Events and festivals are other cultural phenomena that deserve consideration. Festivals are activities that have "intellectual, moral and artistic aspects of human life" associated with them (Throsby, 2001). They can be described as "a sacred or profane time of celebration, marked by special observances." (Falassi, 1987, p. 2), and as a celebration of "community values, ideologies, identity and continuity" (Getz, Andersson, & Carlsen, 2010, p. 30). The literature suggests that festivals and events, by their mere existence, cause positive and negative externalities (Barget & Gouguet, 2007). Individuals

who do not attend a festival may still be affected by it, as a result of traffic congestion, littering, a positive image, etc. (Andersson et al., 2012; Andersson et al., 2004; Snowball, 2005). As such, festivals may be considered as cultural organizations, where practices and habits result in the production, distribution and consumption of cultural goods and services (Getz & Andersson, 2009).

It is, however, fair to say that festivals differ from museums in terms of durability and in regards of experiences. Festivals last for only a few days, and may provide a number of experiences during these days. Museums are designed to last for many years, and provide experiences that commonly last for a couple of hours. Occasionally, the festival experience comprises a combination of different, yet interrelated experiences, outside and inside the festival area. The core experience, i.e. direct use value, may be defined as the sum of experiences within the festival area. Additionally, experiences outside the festival area may give rise to positive and negative indirect use value.

The application of willingness-to-pay studies in a cost-benefit framework is uncommon in an event context, particularly for festivals, and researchers in this area have rarely employed estimations of use and non-use. In situations where trade-offs are necessary, an understanding of the value for one type of investment as compared to another investment is therefore desirable. To assess the value created, it is preferable that methods and techniques should be suitable for estimating the value of various types of cultural institutions.

RQ 3: How can contingent valuation and the concepts of use and non-use value be applied in a festival setting?

3. A description of the value of cultural institutions

Environmental and cultural resources share commonalities due to their public good characteristics. The application of use and non-use value, developed to describe the value of environmental resources, has therefore been applied straightforwardly to a cultural context. While marketing research, for example, has contributed to creating an understanding of the value derived from consumer experiences (use value), research focusing on value independent of consumption (non-use value) has developed in areas such as cultural policy, cultural studies, sociology and anthropology. However, little empirical research to describe the value of cultural institutions has appeared. It is thus unclear, how to describe the content and scope of use and non-use values, how use and non-use value relate to each other, and how these concepts relate to concepts in other disciplines. The second thematic question therefore concerns: *How to describe the perceived value of cultural institutions?*

3.1 A description of the value as derived from consumption

Compared to 'ordinary experiences', cultural goods and services are assumed to be associated with aesthetic quality (Shanahan, 1978; Shusterman, 2008). The aesthetic component of a service or product may be regarded as the stimulus for the experience. Besides the aesthetic stimulus, art experiences also have the potential to serve 'extra-aesthetic' purposes (Shanahan, 1978). Such extra-aesthetic experiences for example may include

"...enjoyment (even where the thoughts and music are essentially sad). Music can be recreational such as dance music; music can be educational such as using the tonal pattern and lyrical form to analyse the style of the composer or period. Music may be experienced in a moment of relaxation while driving from work; music may be experienced in period of recreation by the student who jams with friends; and music may be experienced as education by the listeners who desire to increase their appreciation of classical music - i.e. learn to enjoy it." (Shanahan, 1978, p. 23).

Recognising the aesthetic dimension of art experiences, the purpose of the cultural experience is not necessarily focused on solving a specific problem but on engaging in experiences for the purpose of pleasure. Venkatesh and Meamber (2006) recognize Hirschman's and Holbrook's efforts to categorize and describe experiences of the arts in this

respect. The recognition concerns their contribution to understanding "the notions of the experiential (Holbrook & Hirschman, 1982), symbolic (e.g. Hirschman, 1983), and hedonic properties of artistic (aesthetic) endeavours and products" (Venkatesh & Meamber, 2006, p. 16). The latter refers to enjoyment and pleasure as an output (response) of aesthetic experience, leading to fantasies, emotive aspects and multi-sensory aspects (cf. Venkatesh & Meamber, 2006).

Holbrook (1999), in an attempt to describe experiences, defines consumer value as an "interactive relativistic preference experience" (Holbrook, 1999, p. 5). 'Interactive' implies that consumer value is created by interaction between a subject (consumer) and an object (e.g. art). The term 'relativistic' refers to the comparison of value statements from one person – I like opera better than theatre – but also the illegitimate comparison of value statements between subjects – I like opera better than you do. Relativistic implies that value statements are individualistic and situational. The term 'preferential' suggests that value statements rely on preferences. Finally, 'experience' implies that value does not reside within an object but rather in the experience of it.

Though the definition of consumer value says something about the nature of value, it provides little information about differences among various types of values. In order to understand the categories of consumer value, Holbrook (1999) proposes a framework, that distinguishes between three key dimensions; extrinsic versus intrinsic value, self-oriented versus other oriented value, and active versus reactive value. The 2x2x2 dimensions lead to eight different consumer value categories, as outlined in table 2.

Table 2: A typology of consumer value (Holbrook, 1999)

		<i>Extrinsic</i>	<i>Intrinsic</i>
Self-oriented	Active	EFFICIENCY (Output/Input, convenience)	PLAY (Fun)
	Reactive	EXCELLENCE (Quality)	AESTHETICS (Beauty)
Other-oriented	Active	STATUS (Success, Impression Management)	ETHICS (Virtue, Justice, Morality)
	Reactive	ESTEEM (Reputation, Materialism, Possessions)	SPIRITUALITY (Faith, Ecstasy, Sacredness, Magic)

Extrinsic value implies that goods and services have value since they serve some kind of aim (the educational effect of a museum exhibition). Intrinsic value, on the other hand refers to the value of an experience in itself (listening to a symphony). Self-oriented values

refer to values that a person regards as admirable for him- or herself. In contrast, other-oriented value refers to the value that consumption may have for someone else. In the last dimension, active value refers to the physical or mental involvement of the consumer (performances where the audience is involved), whereas reactive implies that respondents appreciate, admire or, in some other way respond to an experience (the enthusiastic analysis and admiration of paintings) (Holbrook, 1999).

The matrix proposed by Holbrook (1999) describes consumer value but leaves it unclear when an experience starts and ends i.e. the duration. Arnould et al. (2002) propose a division of the experience into four stages: pre-consumption experience, purchase experience, core consumption experience and remembered consumption experience. Direct use value refers to the core experience and indirect use values may be interpreted as including experiences before or after the core experience. The appreciation of watching a report about the opera/play on TV a day after the event took place is thus part of the indirect use value.

3.2 Other research related to the value of cultural institutions

To describe the value of cultural institutions, Mason (2002) proposes a framework that distinguishes between socio-cultural and economic values. Socio-cultural values cover historical values, cultural/symbolic values, social values, spiritual/religious values and aesthetic values (Mason, 2002). This typology considers earlier typologies proposed by, e.g. Lipe (1984), Riegl (1996), ICOMOS (1999), and de la Torre (1997).

Throsby (2001) considers the value of cultural institutions to consist of cultural and economic value. The former involves social, historical, symbolic, spiritual and aesthetic values. The Burra Charter (1999) uses a similar classification, describing cultural significance as consisting of aesthetic, historic, scientific, social or spiritual value for past, present or future generations.

Frey (2008) observes that economic value, as used by Throsby (2001), is sometimes interpreted as representing financial value. However, Throsby (2010) refers to economic value as the value perceived by individuals. The conceptual difference is that, financial value refers to actual money transactions incurred through direct, induced and indirect economic impacts (financial flows) (Bille Hansen, 1995), while economic value refers to a holistic assessment that includes all the benefits and costs perceived by individuals.

As compared to Throsby (2001), Mykletun (2009) uses the concept of capital to describe the outcome of festivals. Capital refers to "representations of resources employed to facilitate any kind of human activity" (Mykletun, 2009 p. 148). Festivals, for example, may be valued by their contribution to social, cultural, physical, human, natural, financial and administrative capital.

A sociological perspective, also chooses to reflect single or bundles of values as capital (Bourdieu, 1973; Bourdieu & Passeron, 1990). Cultural capital is described as obtained knowledge and competence within the arts and culture (Mahar, Harker, & Wilkes, 1990). Cultural capital is the competence to decode a work of art and may be a result of repeated consumption, aesthetic education or inheritance from parents (Bourdieu, 1968). Throsby (2010) also uses the term cultural capital, but describes it as "an asset which embodies, stores or provides cultural value in addition to whatever economic value" (p.46) a cultural good or service may possess.

Mason's (2002) concept of social value is related to social capital. Cultural institutions are regarded as facilitating and catalyzing social interaction and social networks. Throsby (2001) describes social value as "the sense of connection with others" (p. 29) that a work of art or, as in this case, a cultural institution may contribute. While some researchers consider the number of contacts to be most important (Granovetter, 1983), other researchers point to the significance of the strength of the ties (Lin, 2001).

Another value of cultural institutions is their educational effect. Both knowledge and skills may be affected positively through culture. Lipe (1984) refers to the learning effect of culture as informational value, whereas The Burra Charter (1999) and English Heritage (1997) labels it as educational and academic value. Mykletun (2009), in an event context, refers to the same phenomenon as building human capital.

Historical value is primarily related to cultural heritage and significant as a connection to the past, affecting the identity of individuals. It is a representation of the past and is also significant when it comes to the arts. While historical value represents the connection to the past, symbolic value may be interpreted as the ability of a cultural institution to reflect conditions of life in the past and the extent to which they throw light on the present. The stronger the connection, the stronger is the sense of continuity. The symbolic value represents the ability of the arts to act as a vehicle "for conveying cultural meaning" (Throsby, 2001, p. 112).

Spiritual value refers to the context in which culture is perceived. Cultural heritage, for example, may be valuable as a representation of specific religious traditions, for particular tribes or cultural groupings (Throsby, 2001). Spiritual-specific outcomes may be enlightenment or deeper inner insight and/or understanding. Spiritual value particularly is linked to cultural heritage, even though songs and rhythms may be of spiritual significance.

The existing literature shows that research has been directed towards understanding the value of culture and cultural institutions. Previous research may explain use value in terms of consumer value, whereas other disciplinary concepts may be suitable for describing the value without any presupposed use. An economic understanding is governed primarily by theoretical descriptions of use and non-use value. There are few empirical accounts of how individuals describe the value of cultural institutions. Thus, there is limited knowledge on how the research as presented above relates to concepts of use and non-use value.

When measuring the value of cultural institutions from an economic perspective, it is assumed that value is determined by the individuals' perceptions. To describe this value empirically, as perceived by individuals, is desirable since it helps to understand the content and scope of economic values. Based on individuals' preferences, the measured value may eventually get a richer description and understanding. A relevant question is therefore:

RQ 4: How do individuals describe the perceived value of cultural institutions?

A description of how individuals value cultural institutions gives a preliminary understanding and qualitative assessment of the content of value. However, the results are not applicable on a general level. Developing and testing a scale for describing the factors that determine the perceived value of cultural institutions will also enrich the understanding of how cultural institutions create value. Existent research suggests that the value of cultural institutions may be determined by their contribution to positive impacts on social, cultural, educational, health, image and economic development. To build and test a scale, based on existing research, may contribute to an understanding of the value of cultural institutions from the perspective of the individual.

RQ 5: How to develop a scale to measure the perceived value of cultural institutions for individuals?

4. Methods used in the five articles

All but one (article 4) of the articles included are based on quantitative data. The methodological chapter provides an overview of the study objects, sampling procedures, response rates, samples, and the non-response analyses underlying each article.

4.1 Study objects and selection criteria

To measure an object, it has to be clearly defined. Museums and concert halls offer experiences with an identifiable start and end. The experience's beginning may be defined by the visitors entering to a physical building or an exhibition/concert hall. When measuring non-use value, the information available to respondents is important for preference formation, and, therefore, well-defined institutions are advantageous. Institutions with large audiences and proper media coverage may also facilitate the measurement of non-use values.

Many citizens have visited Vara Concert Hall and Nordic Watercolour Museum and most citizens in Västra Götaland know of these institutions through the media. Both institutions are located relatively far from large towns, which facilitates making conclusions about their attractiveness. The museum is limited to exhibiting watercolour paintings whereas the concert hall offers a wide variety of performances.

The value of private and public institutions may differ. To assess these differences, the value of a festival, organized by a private company, is investigated. Way Out West is a music festival, which is held in August in Gohenburg's centrally located city-park (Slottskogen), which involves excluding visitors who normally use the park for recreation. The festival is an annually recurring event with a variety of artists, from rock, electronic music and hip-hop, and it has established itself as one of the major events in Gothenburg.

Three other studies of visitors to the Göteborg Opera, Göteborg City Theatre, Göteborg City Museum were conducted to understand how cultural institutions are valuable to individuals. A fourth study at the Nordic Watercolour Museum was conducted to test the scale developed.

Table 3: An overview of the study objects included in the thesis project. Study (4) did not study one particular cultural institution

#	Study objects	Type	Location (Sweden)	Attendance (approximately)	Ownership	Time of study
(1)	Vara Concert Hall	Concert hall	Vara	50000 annually	Public	Feb-Mar 2008
(2)	Nordic Watercolour	Museum	Tjörn	150000 annually	Public	Nov 2008 Apr 2009
(3)	Way Out West	Festival	Gothenburg	25 000 in 2 days	Private	Aug 2010
(5)	Göteborg Opera	Opera	Gothenburg	250000 annually	Public	Sep. 2011
	Göteborg City Theatre	Theatre	Gothenburg	120000 annually	Public	
	Göteborg City Museum	Museum	Gothenburg	250000 annually	Public	
	Nordic Watercolour	Museum	Tjörn	150000 annually	Public	

4.2 Data collections

The thesis project is based on data from 12 samples and more than 3500 interviews. Article 1 is based on five samples. Two samples represent visitors to the museum and concert hall. Two other samples represent the local population where each institution is situated (Vara and Tjörn). The last sample represents the regional population of Västra Götaland (Region Västra Götaland). Article 2 re-uses two of these samples, to represent the visitors to each institution. Article 3 uses two samples, one representing visitors to the festival and the other local residents of Gothenburg. Article 4 is based on a sample of eight respondents. Article 5 is based on four random samples of visitors to the Göteborg Opera, the Göteborg City Theatre, the Göteborg City Museum and the Watercolour Museum. The sample selection and data collection process are outlined in table 5.

Table 4: Sample selection and data collection process. The table presents a summary of steps involved in the sample selection. The abbreviation (n.a.) indicates that no statistics re available.

Sample number	Article	Interviewer	Sampling method	Place of sampling	Survey mode	Number of questions
1	1 & 2	Researcher & volunteers	Random	Ticket sale/entrances	Web survey	31
2	1 & 2	Researcher & volunteers	Random	Ticket sale/entrances	Web survey	29
3	1	TNS Sifo	Random	Telephone register	Telephone survey	17
4	1	TNS Sifo	Random	Telephone register	Telephone survey	17
5	1	TNS Sifo	Random	Telephone register	Telephone survey	29
6	3	Researcher & volunteers	Random	Ticket sale/entrances	Web survey	31
7	3	Researcher & volunteers	Random	Bus stops/transport nodes/street	Web survey	29
8	4	Researcher	Purposive		Qualitative interviews	(n.a.)
9	5	Students	Random	Ticket sale/ entrances Bus stops/transport nodes/street	Web survey	19
10	5	Students	Random	Ticket sale/entrances Bus stops/transport nodes/street	Web survey	19
11	5	Students	Random	Ticket sale/entrances Bus stops/transport nodes/street	Web survey	19
12	5	Researcher & volunteers	Random	Ticket sale/entrances	Web survey	18

For sample 1 and 2, two reminders were sent out. Sample 3, 4 and 5 were approached up to 15 times by phone. Sample 6 and 7 received three reminders. Sample 9, 10, 11 and 12 received two reminders. Whereas participants in sample 3 were offered the possibility to win one of five tickets for next year's festival, participants in the other samples were not offered any incentives.

Table 5: Summary of samples and response rates. The table describes the population and stages of the process that caused a decrease in the number of responses departing from the total number of individuals approached. The response rate refers to the relationship between responses and individuals approached. For sample 9, 10 and 11 only the number of individuals interested in participating is known (120 each).

Sample number	Population	Individuals approached	Resp. not interested in participation	Resp. not returning contact info.	Incorrect/unreadable e-mail addresses	Non-response	Answers	Response rate
	a	b	c	d	e	f	g (b-c-d-e-f)	(g/b)
1	Visitors to Vara Concert Hall (≈ 35 000 in 2009)	1098	150	140	125	100	583	53.1 %
2	Visitors to Nordic Watercolour Museum (≈ 150 000 in 2009)	1047	188	351	0	94	414	39.5 %
3	Citizens in Vara (16 or older - 13000)	470	220				250	53.2 %
4	Citizens in Tjörn (16 or older - 15000)	493	243				250	50.7 %
5	Citizens in Västra Götaland region (16 or older - 1320000)	797	447				350	43.9 %
6	Way Out West festival (26347 visitors)	1467	192	0	107	449	719	49.0%
7	Citizens in Gothenburg (507000)	2104	797	0	111	548	648	30.8%
8	Individuals with varying degrees of cultural consumption	8	0	0	0	0	8	100 %
9	Residents of Gothenburg (432688) – opera house	(n.a.)	(n.a.)		7		60	50.0%*
10	Residents of Gothenburg (432688) - concert hall	(n.a.)	(n.a.)		5		67	55.8%*
11	Residents of Gothenburg (432688) - museum	(n.a.)	(n.a.)		6		56	46.6%*
12	visitors to Nordic Watercolour Museum (≈ 150 000 in 2009)	508	(n.a.)		25	317	166	32.7%

*response rate is based on 120 randomly sampled respondents indicating their willingness to participate. Response rate is calculated as g/120

Table 5 provides information on the population (a), individuals approached (b), and respondents not interested in participating (c). For those who were interested, some did not return their contact information (d), and some did not receive the questionnaire due to readability/spelling errors in their e-mail addresses (e). Another group of the respondents chose not to answer, despite reminders (f). The number of answers for each study is presented in column g. The last column presents responses rates calculated as (g/b).

Study four is based on exploratory data on individuals' perceptions of the value of cultural institutions. Eight interviews were conducted. The selection of the interviewees was based on the premise to address variation rather than representativeness.

4.3 Non-response analysis

When possible, the data collected was compared to population characteristics as described in Swedish Statistics¹ to assess the representativeness of the samples. When reading the results and conclusions, the reader should bear in mind the distributions as presented in table 6.

Table 6: Respondent characteristics compared to Swedish Statistics. The first line in each row presents the results of each study. The second line with figures in parenthesis refers to official statistics. The abbreviation (n.a.) indicates that no statistics were available.

Sample	population	Gender		Average age	Median income	Education	
		Female	Male			Sec School	University
1	Visitors to Vara Concert Hall	53.4 % (n.a.)	46.6 % (n.a.)	59 years (n.a.)	24 700 € (n.a.)	23% (n.a.)	45% (n.a.)
2	Visitors to Nordic Watercolour Museum	57 % (n.a.)	43 % (n.a.)	55 years (n.a.)	27 600 € (n.a.)	16% (n.a.)	72% (n.a.)
3	Citizens in Vara (16 +)	54.9 % (48.8 %)	45.1 % (51.2 %)	53 years (50 years)	18 630 € (19 600 €)	48 % (52 %)	19 (18%)
4	Citizens in Tjörn (16 +)	51.7 % (48.8 %)	48.3 % (51.2 %)	53 years (50 year)	21 400 € (23 700 €)	46 % (48 %)	37 % (28 %)
5	Citizens in Västra Götaland region (16 +)	44.6 % (50.1 %)	55.4 % (49.9 %)	48 years (47 years)	20 500 € (20 800 €)	46 % (43%)	35 % (31 %)
6	Way Out West festival (26347 visitors)	56% (n.a.)	44% (n.a.)	26 years (n.a.)	29 000 € (n.a.)	32% (n.a.)	64% (n.a.)
7	Citizens in Gothenburg	59% (50.3%)	41% (49.7%)	33 years (39 years)	21 000 € (24 000€)	27% (38%)	69% (41%)
8	Individuals with varying degrees of cultural consumption	62%	38%	42 years		38%	38%
9	Gothenburg Opera House	61 % (50.7%)	39 % (49.3%)	39 years (44.9 years)	31 900 € (24 000€)		
10	Gothenburg Concert Hall	51 % (50.7%)	49 % (49.29%)	42 years (44.9 years)	33 200 € (24 000€)	(38%)	(41%)
11	Gothenburg City Museum	65 % (50.7%)	35 % (49.3%)	40 years (44.9 years)	31 600 € (24 000€)	(38%)	(41%)
12	Visitors to Nordic Watercolour Museum	61.8 % (n.a.)	38.2 % (n.a.)	59 years (51 years)	30 600 € (n.a.)	(n.a.) (n.a.)	(n.a.) (n.a.)

In all but one data collection (sample 5) slightly more female than male respondents answered the questionnaire. In the analysis, the data was weighted to conform to regional statistics. For sample 7, 11 and 12, a significantly larger proportion of females completed the questionnaire. There is variation between the mean age among respondents and the population. Differences are also noticeable when the estimated age was compared to the responses. The average income among respondents in the municipalities or the region seems reasonable when compared to the statistics. For visitors, however, some considerable differences are observed.

When possible, further information on non-respondents was collected. At the concert hall, all visitors had to pass by one of the interviewers. An assessment of the total population in terms of gender and estimated age was thus possible. Table 7 presents the gender and age distribution among visitors for each performance at the concert hall.

¹ www.scb.se

Table 7: Performances studied at the concert hall. The table presents a summary of the age and gender characteristics of the total population included in the survey. The gender distribution is based on observations and age was estimated by the interviewer.

Performance	Female Resp.	Male Resp.	Average age (estimated)
Stand up: Fyra ess	72	50	49.0 years
Puccini på storbild	112	82	59.5 years
Viktorija Tolstoy	198	195	61.3 years
Jill Jonsson	180	324	53.5 years
Jill Jonsson	270	227	55.4 years
Göteborgs Symfoniker	271	229	61.5 years
Till Kungens förnöjelse och Upplevelse + Renässansens Europa	38	45	49.5 years
Smokie	241	202	62.6 years
Sofia Karlsson Band	276	236	60.5 years
Total	1658	1590	57 years
Percent	51.0%	49.0%	

The estimated average age of the attendees was 57 years, and the average age of respondents was 59 years. 51 % of the attendees were female and 49 % were male. This can be compared to the distribution among respondents - 53 % male and 47 % female.

For the museum no data on the population for each exhibition is available. However, as in the concert hall study, gender and estimated age among non-respondents were noted (53 % were female and 47 % were male, estimated mean age; 51 years). To be compared to the composition of respondents, where 57 % were female and 43 % were male.

TNS Sifo, a market research company, was engaged to sample and collect data at a municipal and regional level. The method for data collection was telephone interviews.

Table 8: Non-response analysis for telephone interviews conducted by TNS-Sifo

	Vara	Tjörn	Västra Götaland	Sum
Respondents who principally reject surveys	100	118	206	424
Respondents who did not want or have time to participate	117	116	221	454
Respondent not at home during survey period	3	9	4	16
No contact despite 15 attempts	0	0	16	16
Total	220	243	447	910

The reported data on non-respondents allows a distinction to be made between them in terms of their reasons for not responding. Most non-respondents did not want, or did not have time, to participate. TNS Sifo did not provide an analysis of non-respondents, according to other socioeconomic variables.

For the festival, there is no data on the total population. The gender and estimated age of non-respondents were collected. The mean age for those who did not participate was 27, while the mean age in the sample was 26 years. Just as many males as females refused to participate.

5. Brief summaries and conclusions from the articles

In what follows, a short summary and conclusions for each article will be presented. The first three sections concern the thematic question regarding the measurement of perceived value, whereas the following two sections deal with the thematic question regarding the description of perceived value.

5.1 Summary and conclusions from article 1

The underlying argument is that assessments of cultural institutions need to be based not only on costs but also on the value created. The first research question is: *What is the value of a cultural institution as measured by the contingent valuation method?* To compare costs and benefits, the value created should be preferably measured in monetary units. The contingent valuation method and willingness-to-pay were applied to assess the use and non-use value of a concert hall and a museum in monetary units. The average use value (direct and indirect) for Vara Concert Hall and the Nordic Watercolour Museum exceeds the costs incurred for visitors. There were no significant differences between local and non-local visitors, with one exception: the expenditure of those travelling to the institutions was significantly higher than the expenditure of those who lived in the municipalities. There are significant, but weak correlations, between the use value in the concert hall and age (negative), education (positive), annual income (positive) and gender (higher for men). Only age (negative) had a significant correlation with use value at the museum.

Non-use values co-vary in a significantly negative way with the distance to each cultural institution, which is comparable to earlier public good assessments (Bateman & Langford, 1997; Sutherland & Walsh, 1985). The average non-use value for Vara Concert Hall and the Nordic Watercolour Museum for the local population was significantly higher than for an average inhabitant in Västtra Götaland. The option value, bequest value and existence value are also significantly higher. For an average inhabitant of Västtra Götaland, there are no significant differences between the non-use value of the concert hall and the museum. Nor are there any significant differences between the option value, bequest value and existence value. Similar to a previous study by Riganti and Willis (2002), a relationship between knowledge and perceived value was observed. Individuals who have visited the cultural institutions value them significantly higher (non-use value) than those who have never visited them. Although residents of Västtra Götaland showed significantly lower average

non-use value per inhabitant, the majority of region's inhabitants indicate an interest in investing tax funds to maintain the institutions. It is worth noting that the bequest value accounts for the greatest non-use value. There appears to be a great concern for future generations in Vara, and there is a strong willingness to pass on to the next generation a society with cultural assets. The same applies to Tjörn.

At the municipal level, the aggregate use value is dominant. In the case of Vara Concert Hall, use value accounts for 82% of the total annual value. This proportion is even higher for the museum. An analysis of regional visitors shows that culture is not subject to municipal boundaries, and inhabitants of other municipalities obtain profit greatly from the cultural institutions.

If use and non-use values are taken as an indicator of the yield of culture, then the yield is far greater than the financial investment. These findings are consistent with those of Noonan (2003), who in a meta-analysis of contingent valuation studies, found that the estimated value of cultural resources, on average, exceeds the operational costs by around 120%.

5.2 Summary and conclusions from article 2

The research question regarding the second article is: *Do contingent valuation and travel cost method produce the same or at least similar measures of use values?* The travel cost method (zonal) (TCM) is introduced in a Swedish context in order to measure the use value of two cultural institutions - Vara Concert Hall and the Nordic Watercolour Museum. The aim is to compare the results from the contingent valuation method (CVM) with those from the travel cost method.

The application of CVM and TCM yielded three different value estimates. CVM-direct reflects the *direct use* value of the contingent valuation assessment, CVM-total represents the *direct* plus the *indirect use* value using the same method and TCM-total represents the use value as estimated by the travel cost method at each cultural institution. CVM-direct for the concert hall and the museum are similar (the value of experiences at the museum are 10% larger). CVM-total for the museum is considerably larger than estimates for the concert hall (approximately 200% larger). Furthermore, CVM- total for the concert hall is 46% larger than CVM-direct at the same institution. At the museum, CVM-total is approximately 300% larger than CVM-direct. The TCM-total for the concert hall is

somewhat larger than CVM-direct, but smaller than CVM-total. For the museum, the difference between TCM-value and CVM-direct is large (approximately 250%), but relatively smaller when the TCM-value is compared to CVM-total.

Some conclusions can be drawn: first, the CVM-total at the museum is probably part of a bundle of experiences, including the beautiful surrounding of the archipelago, the opportunities for taking walks and visits to a nearby harbour. Thus, CVM-total may be inappropriate when considering the value of experiences at a cultural institution. Secondly, the core cultural experience at the concert hall seems to be the most important aspect. Few other experiences increase the perceived value. CVM-total is thus similar to CVM-direct.

For the museum, the travel cost method yields considerably larger estimates than contingent valuation method does for CVM-direct, but similar estimates for CVM-total. Even though only individuals whose primary reason for travel was the cultural experience were included, the results indicate that even these trips were not single purpose trips and individuals had other valuable experiences apart from the core cultural experience.

The travel cost method, as used in this study, seems to be measuring the total experience, i.e. the core cultural experience plus any other experience during the visit. The relatedness between TCM-total and CVM-total at the museum allows for another tentative conclusion: it is inappropriate to apply the travel cost method when the total experience is influenced by a large indirect use value. These conclusions are consistent with the limitations pointed out by Navrud & Ready (2002), Poor and Smith (2004) and Rizzo and Throsby (2009), who observed difficulties in ascribing travel costs to just one attraction since trips, in most cases, are multipurpose. Applications of other than the zonal-travel cost method may be more appropriate.

One issue to be considered is the assumptions made. In the analysis, travel costs were defined as vehicle costs, entrance fee costs and the opportunity cost of time. The opportunity cost of time is without doubt the most debatable. In this study, it was decided to include the opportunity cost of time. The average hourly wage was used as the basis. The time cost in its turn was calculated as 1/3 of the hourly wage, which, though contestable, has been used in earlier studies (McConnell & Strand, 1981; Navrud & Mungatana, 1994; Poor & Smith, 2004; Ward, Johnson, McConnell, & Strand, 1983). The assumption remains arbitrary since it may be argued that travelling per se is a valuable experience whereas others might experience travelling as a cost (Randall, 1994). Moreover, the individual level of income may influence the perceived costs. Therefore, both wage and rate may be contested. Another

assumption influencing the results is that the individual's behaviour, in relation to the costs of entry, is assumed to be identical to the behaviour in relation to the costs of travel. This may not necessarily be the case.

5.3 Summary and conclusions from article 3

The third article uses a cost-benefit framework to assess the value of a festival. Specifically, the article deals with the question: *How can the contingent valuation method and the concepts of use and non-use value be applied in a festival setting?*

The average use value is estimated to be €282 per visitor, divided fairly equally between direct use value €146 and indirect use value €137. Whereas the local population benefits from a considerable share of the direct use value, the indirect use value is mainly enjoyed by the visitors. The estimated direct use value seems to be related to the actual ticket price, which may reflect not only a methodological bias but probably also the intuition and developed pricing skills of the organiser.

The use value, representing the core experience, constitutes the largest value (€7.4 million) but the non-use value is also important (€3 million). A large proportion of the use value is enjoyed by non-local residents. A high proportion of the use value created for individuals living outside Gothenburg means that a large proportion of the use value (72% or €5.3 million) was 'exported' to other regions, and other countries, when visitors returned home with their memories. Furthermore, a large proportion of the use value was also reflected in financial terms by the visitors' expenditure in the city (€ 4.1 million). It is also reasonable to assume that positive experiences in Gothenburg may contribute to a positive image of Gothenburg and thus lead to possible future tourism.

Non-use value is primarily a value for the local residents, reflecting for example social, cultural and environmental implications for the local community. Including non-use value in the analysis is interesting since it indicates the attitudes of the local population towards the festival. Festivals are often used for economic development in terms of tourism. The advantage of including non-use values in the assessment is the possibility to compare the financial effects directly with the positive *and* negative effects perceived by society, as measured in monetary units (Andersson, 1985). In the present study, 3% of the sample regarded it as appropriate from them to receive a tax reduction as compensation for the inconveniences associated with the festival. The average requested compensation is

comparatively high (€-2). The net non-use value is positive and estimated to be €6 on average. The total non-use value represents almost 30% of the total value of the festival, which indicates a strong appreciation of the festival among local residents.

5.4 Summary and conclusions from article 4

The fourth study aims to understand the value of cultural institutions in terms of the value perceived by individuals. The research question concerns: *How do individuals describe the perceived value of cultural institutions?* The research question implies 1) describing and categorising the value perceived by individuals, 2) understanding the scope, and 3) enriching our understanding of the economic value concepts (use and non-use value) in a cultural context. Qualitative interviews and previous literature are used to investigate the value as perceived by individuals.

Notably, direct use value relies on several different factors, which intuitively may be thought of as related to public or non-use values. Identity, communal meaning and cultural capital may serve as examples. In combination with other effects, such as learning skills, self-efficacy and improved test scores, direct use value appears to be perceived as a broad concept, capturing many different benefits of culture. Compared to direct use value, indirect use value is not likely to contribute with the same variety of benefits. In fact, this study showed that indirect use value seems to be less multifaceted, but even that indirect use value is similar to use value.

The benefits attributable to non-use value, particularly option and bequest value overlap considerably with those of direct use value. This may suggest difficulties when it comes to defining and delimitating use from non-use values. However, direct use value, option value and bequest value refer to different time horizons. Direct use value refers to the value of current and, particularly, past experiences. Option value is the value individuals perceive when having the opportunity to access cultural institutions in near future. Option value thus refers to private consumption. Bequest value also refers to the future, but further remote in terms of time. Furthermore, the value represents the perceived benefits of preserving culture for future generations, not for one's own private consumption.

Assuming that the uncertainty, regarding value, will increase the further into the future the time is when it will be realised, it is reasonable for respondents to have less knowledge about the benefits that may accrue to themselves or other generations in the future. This

uncertainty may well be reflected in less detailed descriptions of option and in particular bequest value.

Use and non-use values seemingly overlap in terms of the aspects that are perceived as valuable. When time is introduced as another dimension, economic values may be interpreted however as referring to similar aspects, but separable in terms of time. Furthermore, economic values seem to cover many aspects described in other disciplines, such as health-related, social, economic, or cognitive aspects of culture. This study supports Mason's (2002) argument that, economic and non-economic frameworks "do not actually refer to different, discrete sets of values. Economic and cultural are two alternative ways of understanding and labelling the same, wide range of ... values" (Mason, 2002, p. 11). To what extent economic values can cover non-economic values is not yet clear.

5.5 Summary and conclusions from article 5

The fifth article aims to develop a scale for measuring the factors that make cultural institutions valuable to individuals and it is partly based on the results from the fourth article. Specifically, the article aims to answer: *How to develop a scale to measure the perceived value of cultural institutions for individuals?* The study used exploratory and confirmatory factor analysis to develop a scale, which consists of six factors and 19 items that determine the perceived value of cultural institutions.

The scale proposes that six factors may be suitable to describe the value of cultural institutions. They are the perceived contribution to: image, education, health, economic development, social relationships and identity.

One issue to be considered is whether it is possible to distinguish between different kinds of values. Economic impact, at a first glance, might be rather easy to distinguish from other values. However, economic impact may also be influenced by the other values, such as education or a large number of social contacts. For example, in a survey situation, some individuals may react positively to the statement that, cultural institutions contribute to more social contacts, education and health. It may then be quite likely that when asked about the economic value of the same cultural institutions, they will also react positively. Similar scenarios could be drawn for social and identity/cultural values. In fact, these two values are often referred to as socio-cultural values, since they are difficult to distinguish.

Difficulties in theoretically and, in survey situations, separating these factors particularly draws on the dimensionality and thus co-variation in the model.

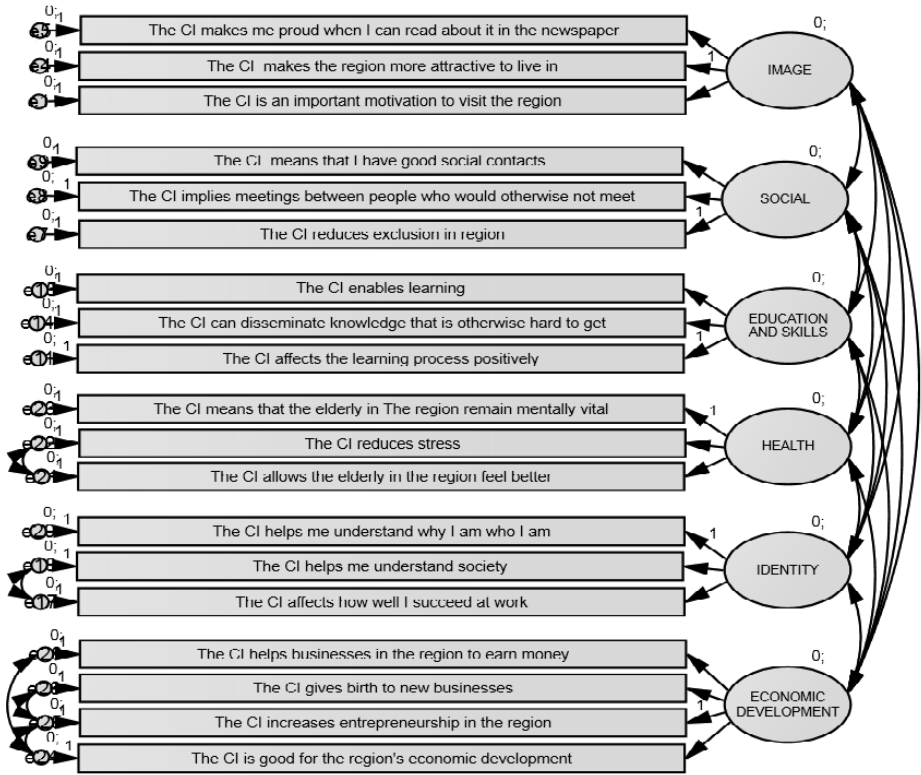


Figure 2: A six factor scale measured by 19 items

The choice to include six and not two, three, four or five factors is based mainly on earlier research (cf. article 4; McCarthy et al., 2004). While the statistical methods used in this study, did not contradict the development of a six-factor model, it may be worthwhile to analyse the dimensionality of the values further, to arrive at a better fitting model. Efforts to refine the scale certainly have good chances of increasing the predictive power of the scale.

From a cultural policy and management perspective, the scale may be used to gauge a broad variety of cultural institutions and to understand the differences in the perceived value. Developed in a 'fine arts' context, the application of the scale to 'popular culture' may be worthwhile, in order to test its appropriateness and, possibly, to compare the results to those presented in this article.

6. Conclusions and reflections

This thesis has been guided by an overall interest in understanding *the value of cultural institutions*. Two thematic questions have served to structure the articles and the thesis. The first thematic question concerned: *How to measure the perceived value of cultural institutions?* The second thematic question concerned: *How to describe the perceived value of cultural institutions?* In what follows, conclusions, limitations and suggestions for future research on each of the thematic questions will be presented. Thereafter, conclusions and reflections regarding the overall question will be provided.

6.1 How to measure the value of cultural institutions?

Applying the contingent valuation method to two regional cultural institutions in Sweden suggests the created value exceeds the resources needed to sustain the institutions. The results stress that the visitors to each of the cultural institutions derived more value from the experiences than they paid for their tickets. Individuals also regarded the value created, despite any use, to exceed the public resources invested. These results are comparable with previous studies in a Scandinavian context. Bille Hansen (1997) estimated the value of the Royal Theatre in Copenhagen to exceed considerably the public resources invested. Similar results have also been found at the international level (Nonnan, 2003). Interestingly, the analysis showed hardly any correlations between perceived value and the socioeconomic characteristics of the respondents (cf. article 1), as could have been expected (Seaman, 2009). The results can be interpreted therefore as if both institutions succeeded in attracting and providing value to different groups of people. Because previous studies have often found significant relationships between, for example, income and education and the perceived value, the results may also suggest that the samples may not accurately represent the population. The non-response analysis does, however, not support this assumption.

Applying the zonal travel cost method showed convergent validity with contingent valuation method, when assessing the total use value (direct and indirect use value). Nevertheless, as in previous research (Navrud & Ready, 2002), the results suggest that the zonal travel cost method is problematic when it comes to measuring the value of experiences that consist of more than just the core cultural experience. Assuming that the

costs of travel are solely attributable to one single experience may be incorrect in most cases (Randall, 1994) even though only visitors who mentioned the cultural experience to be the major attraction were included. Nature, culinary and other cultural experiences may affect travel behaviour. The zonal travel cost method, as part of revealed preference techniques, is therefore often likely to overestimate the value of a cultural institution as suggested by Carson et al. (1996). Another flaw is the limitation to "use values" and thus an inability to capture the total value created by cultural institutions. However, travel cost is advantageous, since it is based on observed behaviour. The strength of one method is the weakness of the other. Contingent valuation is a scenario method, which asks respondents to state their preferences hypothetically. But contingent valuation method has the advantage that it is able to assess parts of the total experience and to capture both use and non-use values, providing a more holistic picture of the value created.

Assessing the correspondence of one measure to another is one way to determine the validity of a construct. Another way to assess the validity is to compare the results with a predicted pattern, based on theory and/or observations (Mitchell & Carson, 1989). Some performances at the concert hall were organized by the private sector while others were organized by the concert hall acting as a public organization. Comparing the estimated value of privately and publicly organized performances, it turned out that the average consumer surplus for all privately organized performances was significantly lower than for those organized by a public organization (cf. article 1). This result is consistent with what would be expected, namely assuming that private organizations are eager to maximize profits whereas, for political reasons, public organizations are more concerned about creating consumer surplus for the public.

Applying a cost-benefit framework and the concepts of use and non-use value to a festival proved successful. The results indicate that use values are the primary source of value creation. But elicited non-use values suggest that an assessment of the value created also depends on positive and negative non-use values. The application of contingent valuation method to a festival setting also gave further insight into possible differences between publicly and privately managed cultural activities. Compared to the museum and the concert hall, where non-use values outweighed use values, the results of the festival study showed the opposite pattern. Use values were significantly larger than non-use values. Thus, the festival seems to be successful from a consumer perspective and traditional institutions may learn from festivals about how to create value for the consumer.

6.2 How to describe the perceived value of cultural institutions?

Use and non-use values are concepts developed primarily in an environmental setting (Garrod & Willis, 2001). Lately they have been adopted in a cultural context as well (Noonan, 2003). Empirical descriptions of their content are, however, rare. Therefore, the question why individuals perceive cultural institutions to be valuable was posed.

The value that individuals' perceive cultural institutions to contribute with covers a broad variety of social-cultural, health and education related benefits. Relating economic values to a framework, proposed by McCarthy et al. (2004), covering a multiplicity of benefits of cultural institutions, enabled conclusions to be drawn about the content and scope of economic concepts.

Use value covers aspects such as pleasure and captivation, but also benefits such as cognitive growth, expanded capacity for empathy, self-efficacy, learning skills and improved test scores. Furthermore, instrumental benefits such as social, health related and perceived economic effects were revealed as important. Intrinsic benefits, such as the perceived contribution to identity and the perceived communal meaning, were also regarded as significant. Option and bequest value cover similar aspects as use value, suggesting a relationship between the value categories, as provided in the literature (Throsby, 2001). The option value may be interpreted as a future use value. The bequest value represents the value perceived by individuals in preserving cultural assets and experiences for future generations. Option and bequest value, however, are more remote in terms of time. Existence value is the concept with the least rich description. The results suggested that this covers the perceived contribution to identity and communal meaning as well as social and economic benefits. In general, the results indicate a decreasing scope from use value to option to bequest and finally to existence value. This may suggest an increasing uncertainty among individuals about values that will arise in the future as well as for society in general.

Departing from the descriptions and categorizations, suggested in article 4, six factors were outlined in order to describe the development of a scale. These factors were: economic impact, image, social, identity, health and educational values. The scale measures the extent to which a cultural institution is perceived to contribute to one of the benefits captured by the factors. As a quantitative measure, the scale allows an understanding of the aspects individuals perceive to be valuable. While contingent valuation method allows for

comparisons of use and non-use value in monetary terms, the scale describes whether a cultural institution is perceived as contributing in financial, educational, health related, image related, social or identity related terms. The scale may be used instrumentally to judge which cultural institutions are perceived as contributing to one of the benefits. An understanding of what aspects create value for individuals may in future allow more specific questions to be framed, eliciting the value that individuals perceive. The scale can also be set in relation to the measured value of cultural institutions to understand what factors determine individuals' willingness-to-pay.

6.3 What is the value of cultural institutions?

Parts of the value of cultural institutions are measurable in terms of revealed market transactions. The turnover generated through entrance fees may, for example, be calculated using the number of visitors multiplied by the average entrance fee. If a cultural institution stimulates tourism, the share of tourism attributable to the experiences provided at the cultural institution, can also be included to assess the value of that institution. However, limiting the assessment to these measures, would be an evaluation on an incorrect basis since the evaluation has to be done in relation to the purpose of the activity, and the purpose of cultural institutions is not to attract tourists or create jobs (Bille Hansen, 1995). Furthermore, these values adhere primarily to the experiences and thus use values. Characterized by public good aspects, use values may, however, not encompass all benefits of cultural institutions (Ready & Navrud, 2002). Two aspects call for a broader assessment of the value created. First, use value may be larger than the traces that may be observed in markets. Secondly, cultural institutions may be valuable, whether or not they are used.

This thesis project has investigated the value of cultural institutions within a cost-benefit framework. Contingent valuation method has been applied to two cultural institutions of regional character in Sweden. A majority of the visitors, to any of the institutions, perceived the value derived from the experiences to exceed the financial price they paid for it. These results seem valid for at least three reasons: first, based on utility maximizing behaviour, individuals are only to be expected to consume goods and services, if the perceived (expected) value exceeds the price. Secondly, the difference between the price and created value is likely to be higher if the experience is publicly organized, compared to privately organized experiences. The thesis project was able to demonstrate this pattern in article 1

and 3. Thirdly, the application of two non-market valuation techniques supports the results showing the value created exceeded the price (article 1, 2 and 3).

Contingent valuation method, as part of cost-benefit analysis, contributes to an understanding of the fundamental economic problem of allocating scarce resources in the face of unlimited wants. Employing fully-fledged cost-benefit analyses may be attractive to society when it comes to deciding how and where to allocate scarce resources. The attention of this thesis project has not been on cost-benefit analyses and the costs imposed on society have not been taken into account. But the focus has been on how to assess the value created. Comparative assessments and inferences on efficiency are thus not possible. But the results suggest that if efficiency is of interest, then the value assessed by non-market valuations may provide useful information besides, for example, an economic impact analysis.

6.4 Reflections and speculations

A major advantage of the methods advocated in this thesis project, is that costs for society eventually can be set in relation to the benefits. Conclusions about created value are possible and assessments of value can yield input for the management of cultural institutions. From a tourism perspective, value assessment may suggest which attractions need to adapt and/or change strategies or should be promoted in order to improve the tourist destination. Using non-market valuation techniques, may also allow for conclusions about pricing strategies among different market segments. Differentiated pricing offers possibilities for decreasing exclusion of individuals with relatively low willingness-to-pay through offering the opportunity to pay more to those who are willing to do so. This may eventually lead to increase the value created by increasing the number of visitors and thus use and non-use values.

The primary focus of this thesis project has been on created value, and little has been said about distributional and equity issues. However, these aspects may also deserve consideration when discussing the value of cultural institutions. Researchers have established that the way individuals consume culture is determined by their socioeconomic characteristics. Particularly audiences of performing arts are 'elite' in respect to income, education and profession (National Endowment for the Arts, 2004; Seaman, 2009). The assumption that the value created by cultural experiences (use value) is distributed

unevenly and some groups benefit more than others cannot be excluded (Throsby, 2001). Furthermore, this study has shown significant relationships between use and non-use value (cf. article 1). Non-use value therefore may also be distributed unevenly. This situation may not necessarily be axiomatic, but a reflection of consumption behaviour (Lévy-Garboua & Montmarquette, 1996, 2003). A more even distribution of the value may be attained by facilitating easy access to culture, in order to bring in and lead consumers up the 'culture career ladder' (Brito & Barros, 2005). The methods presented in this thesis are among the few suitable for assessing created value *and* how it is distributed. Further investigation of distributional inequalities is suggested as one track for future research.

Another distributional issue is how value is dispersed over geographical areas. This thesis proposes that if the municipality borders, in which the experiences are produced, are taken as the natural borders for analysis, large proportions of the use value are exported to other regions and countries. The positive memories visitors take home may influence the image of the destination positively and may possibly lead to future visits. Thus, the 'export' of use values may eventually lead to increased returns from the impact of tourism. Regarding non-use value, nor is its dissemination subject to any municipal or regional borders either (cf. article 1 and 3). While the perceived non-use value diminishes with increasing distance, the results still indicate an appreciation of the cultural institutions in remote regions as well.

On the basis of these contributions, can non-market valuation methods be recommended? Stated and revealed preference methods for assessing the value created may provide a new input to balance the established processes of assessing value of cultural institutions. Relying only on stated or revealed preference methods, however, may not provide sufficient information to take well-informed decisions. Individuals may, for example, not be able to assess all benefits of an opera house due to lack of knowledge. Non-market valuation methods to estimate the value created may thus fail if individuals do not have enough knowledge about the study object (Bergstrom et al., 1990). The value of an opera house may therefore be underestimated, if expert arguments are ignored. However, allocating public resources only based on expert assessments may also be dangerous, leading to questionable resource allocations and arbitrary decisions.

Assuming that the contingent valuation method, and under certain conditions, also the travel cost method yield valid results, a reflecting on *what* has been measured may be worthwhile. Thinking of a person experiencing a piece of art, the utility (*experienced utility*) of this person is likely to vary during the period of the experience. The assessed

value is, however, an overall assessment of observed preferences (*decision utility*), which implies that contingent valuation necessarily is a *post hoc* assessment of the experience. It is a summary of a number of 'changes in utility'. The remembered utility as elicited in this thesis project is not necessarily the same as the *experienced utility* (Kahneman, 2000). Time, context and social environment of the visitor may eventually change the value that individuals reveal in a survey situation. It may therefore be contended that despite the correct application of the contingent valuation method, the measured value is not necessarily an exact assessment of the perceived utility during the experience.

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