



The values of cultural goods and cultural capital externalities: state of the art and future research prospects

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Abstract

Cultural economics has largely looked toward environmental economics and used non-market valuation techniques such as contingent valuation to estimate the total economic value of cultural goods. These methods are well suited to the valuation of cultural heritage goods, where the benefits are mostly related to the level of *supply* and mainly take the form of existence and bequest values. This stands in contrast to cultural institutions such as theatres, libraries, exhibitions, and concerts, where the value is produced, when the goods are *consumed*. For this type of cultural goods, I suggest that cultural economics rather turn to find inspiration in the economics of education. The value of schooling can be divided into private returns and social returns (human capital externalities). Likewise, the value of cultural consumption can have a private and a public component, where I suggest labeling the public component *cultural capital externalities*. The idea is that when private consumption of arts and culture is taking place, the individual will accumulate cultural capital. This accumulated cultural capital can impact other people (e.g., through changed behavior, future decisions or interactions) and create externalities, i.e., the cultural capital externalities. The size of the externalities is expected to increase (or decrease) with the level of consumption. Without the consumption by the users, no externalities are produced. While this is one of the most fundamental arguments for cultural policy, it has not yet been extensively studied within cultural economics.

Keywords Values · Non-market valuation · Cultural capital externalities

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1 Introduction

It is truly a great honor to give this presidential address. ACEI has been my academic home for about 30 years. In 1992, I attended my first conference in Fort Worth, Texas, where I gave my first paper presentation. I was a PhD-student, and the paper I presented was a critical discussion of economic impact studies (Bille Hansen, 1992), which were quite popular at that time.

This led me to search for other possible methods for valuation of arts and culture, and I ended up conducting a contingent valuation study of the Royal Danish Theater, which was published in *Journal of Cultural Economics* in 1997 (Bille, 2002; Bille Hansen, 1997). At that time, there were very few contingent valuation studies of culture. While the method had been developed and applied in environmental economics for a number of years, it was new in the field of cultural economics. The number of contingent valuation studies could almost be counted on one hand. I got inspired by Throsby's and Wither's study from 1983 in Sydney of the citizens' WTP for culture as a public good. As always, David Throsby was at the forefront and of great inspiration. Actually, David was the one who got me interested in cultural economics by his book with Glenn Withers from 1979: *The Economics of the performing arts*. But that is another story.

Apart from my interest in the value of culture and how to measure it, I have a great interest in cultural policy and how to guide cultural policy decisions. During my career, I have done research on many other different topics, but lately, I have returned to the question of valuation, and together with my colleague Andrea Baldin and a few others, I conducted a valuation study of museums and theaters in Denmark in 2020. This has made me reflect on the topic again. In my talk today, I will draw on some of the new results from our project.

An important value of arts and culture is related to the impact it has on the individuals participating and consuming them. This can in turn be expected to have wider impacts on society. While it is one of the most fundamental arguments for cultural policy, it has not been extensively studied within cultural economics.

In my talk today, I will try to address this important topic, mainly by suggesting a new concept, namely *cultural capital externalities*. In the first part of my talk today, I will give a brief historical context in terms of how the field has developed over time and point to some of the most important and major developments. In the second part of my talk, I will turn to some challenges, when it comes to measurement of the value of culture and make some reflections on possible solutions. Finally, I will provide some reflections on implications for effective cultural policy.

2 Historical context

Since the early start of cultural economics as a research field in the 1960s, one of the main topics has been arguments related to public support for the arts and culture (Throsby, 1994). The common understanding is that the main arguments

are based on public good characteristics, consumer externalities and related market failures. The public benefits arising from culture can be regarded as neither rival, nor excludable. In their book “Arts & Economics” from 1989, Bruno Frey and Werner Pommerehne identified several types of externalities and non-market benefit in relation to arts and culture. Following environmental economics, they mentioned option value, bequest value, and existence value, and they furthermore added prestige value and education value as positive externalities related specifically to arts and culture. These benefits escape the ordinary market.

This originates a research interest in understanding and measuring the value of the arts and culture for users as well as non-users. I will give a very brief summary of some important takeaways from this literature. The existing literature can be divided into two streams.

The first stream draws on economic methods and is an empirical-oriented literature. It covers: (1) Studies of economic impact and other types of impact, (2) Impact on the participants (sometimes also called intrinsic value), and (3) Non-market valuation studies.

The second stream covers theoretical developments concerned with an understanding of the values of arts and culture, as well as the limitations of economic theory and methods when it comes to understanding and measuring these values.

2.1 Empirical studies

2.1.1 Studies of economic impact and other types of impact

Many studies have been done to measure the economic impact of culture. Bruce Seaman has provided a nice overview in *Handbook of Cultural Economics* (Seaman, 2020). While the impact of the arts and culture on employment and income remains a popular argument among politicians, it has largely been dismissed by economists due to the lack of considerations of opportunity costs and other failures. An innovative contribution to the topic of arts’ impact on growth as well as the economy’s impact on the development of the arts is given in Michael Hutter’s “The rise of the joyful economy” from 2015.

The impact of participation in arts and culture on well-being is a topic which is less researched although there are some studies published in *Journal of Cultural Economics*. Recently, together with Andrea Baldin, I have published an article on the topic (Baldin & Bille, 2023), and it is great to see that there are several good papers about this important area presented here at the ACEI biennial conference in 2023.

The impact on health from participation in arts and culture is also a relatively new topic, which has created a lot of attention—including from politicians. Yet, it is difficult to find any studies on this topic in cultural economics. But other fields and journals have published papers on the topic (e.g., Fancourt and Finn, 2019). All these types of impact are instrumental in the way that they serve other purposes.

2.1.2 Impact on the participants

There exists an extended literature of qualitative research and case studies showing the effects on individuals from participating in the arts and culture. The “cultural value project,” a major UK project funded by the Arts and Humanities Research Council (Crossick & Kaszynska, 2016), provides a lot of valuable insights into these matters, and Carnwath and Brown (2014) provide a nice overview of the literature. This literature points to effects such as engagement, personal development, learning, thinking, aesthetic development and social cohesion. However, the effects on the individuals are dependent on personal characteristics, the content and quality of the cultural activity, as well as the social context. Therefore, generalizations are extremely difficult, and when it comes to comparisons of the intensity of the effects across cultural activities, it gets impossible. Furthermore, establishing a causal link from the impact on the individual to the social returns generated at the societal level is even more difficult. Arjo Klamer and his team have been working on the topic, but apart from this, it has not been much researched in cultural economics. This is a challenge, as it is one of the most fundamental cultural policy arguments. I will return to this important point (in Sect. 4).

2.1.3 Non-market valuation studies

The contingent valuation method and related stated preference techniques such as choice experiments attempt to assign an economic value to a public good. It is important to note that these methods are based on the standard assumptions of classical economics. There are of course many challenges in the form of possible biases, such as hypothetical bias, strategic bias, embedding effects and so on. However, the mainstream understanding is that despite the difficulties, economists working on the valuation of demand for public goods have had little alternative but to apply these techniques.

In 2003, Douglas Noonan provided a review of about 130 contingent valuation studies undertaken within cultural economics (Noonan, 2003). The studies covered a broad range of cultural goods, such as: archeological sites, arts, broadcasting, performing arts, heritage, museums, libraries, and sports. It is interesting to notice, that none of the studies are especially concerned with the specific *types* of externalities that these cultural goods provide. For instance, most studies ask about the value of institutions, without specifying the values further or more explicitly than that.

For many cultural goods, especially those provided by cultural institutions, where use value is the most obvious benefit, the lack of an understanding of the consumer externalities sometimes makes it difficult to create a valid and reliable hypothetical scenario for valuation studies. This is especially the case if the values are related to the impact on the individual attending arts and culture and related externalities. This is another important point, which I will also get back to (Sect. 4).

David Throsby has further pointed toward several other reasons on which it can be argued that willingness to pay (WTP) is an inadequate indicator of cultural value (Throsby, 2001, 2003). These challenges have slowed down the application of stated preference methods in cultural economics. While the method has been continuously

applied and developed in environmental economics, the development in cultural economics seems to have stagnated. Aleksandra Wisniewska and her team from University of Warsaw in Poland are among the few younger researchers who recently have shown a great interest in valuation studies and has applied the method to cultural institutions in Poland (Wisniewska). And at this conference, there have been several new papers dedicated to this, which is great to see.

2.2 Theoretical developments

Turning to the theoretical developments, David Throsby has been most influential with his concept of ‘cultural value,’ and he points out that while economic value, including non-market value, is measurable and expressible in quantitative terms, “cultural value is multidimensional, unstable, contested, lacks a common unit of account, and may contain elements that cannot be easily expressed according to any quantitative or qualitative scale” (Throsby, 2001).

David has also introduced a concept of cultural capital: “Cultural capital, in an economic sense, can provide a means of representing culture, which enables both tangible and intangible manifestation of culture to be articulated as long-lasting stores of value and providers of benefits for individuals and groups.” This concept of cultural capital is different from Pierre Bourdieu’s (Bourdieu, 1986) in the sense that Throsby’s concept is not related to the individuals per se, but rather is imbedded in the cultural object. In this sense, cultural capital is an asset, which embodies, stores, or provides cultural value, in addition to whatever economic value it may possess. David has further emphasized the importance of distinguishing between stocks and flows. The stock of cultural capital refers to the quantity of such capital, and the stock gives rise over time to a flow of benefits and services with can be consumed.

While the concept of ‘cultural value’ has been most influential, the next question concerning how to measure these values has been more challenging. An entirely new set of methods and indicators is needed, and various kinds of cultural indicators have been proposed, but the development is still in its infancy. Proposed methods include mapping, thick description, attitudinal analysis, content analysis and expert appraisal.

2.3 Current challenges

To sum up, there have been several great achievements and major developments in the field. However, we are still facing several challenges, if we want a better understanding of the different values generated by arts and cultural activities, and likewise, if we want our research to be able to provide policy guidance. Some of the main challenges are:

1. Limitations of stated preference studies in measuring economic value
2. Measurement of the impact on individuals from attending arts and cultural activities and the related private and social benefits.

3. Being able to measure and operationalize David Throsby' concept of cultural value.

In the following, I will elaborate on the first two challenges and point toward possible solutions and some future research prospects. I will use some results from the recent Danish valuation study on theatres and museums that I have conducted together with Andrea Baldin, Sebastian Honoré and Hanna Nyborg Storm, as the basis for my discussion.

3 Challenge 1: stated preference methods for measurement of economic value

Let me start with some challenges using stated preference methods.

Recent valuation studies have shown some puzzling results. Aleksandra Wiesniewska and her co-author found in a recent study that the WTP for a 25% and a 50% increase in theatre offers in Poland were not significantly different (Wiesniewska and Zawojak, 2023). Jen Snowball (2005) reached a similar conclusion in a valuation study of art festivals in South Africa in 2005. In other words, the estimates do not meet the scope property and are difficult to interpret within rational marginal utility theory. This is a well know challenge. Even though recent literature puts into question the scope insensitivity assumption in valuation studies and the use of scope tests for the validity verification (Johnston et al., 2017), the lack of scope sensitivity makes the results difficult to use as a basis for cultural policy decisions.

However, the puzzling results might also be the result of more profound challenges with stated preference methods when it comes to valuation of some types of cultural goods. What are the changes in benefits related to a change in the supply of theatres by 25%? That is a tough question. The problem is that for cultural institutions, such as theatres, libraries, exhibitions, and concert houses, use value is the most obvious benefit, and it can be challenging to describe and assess the value for non-users.

Theaters and other cultural institutions present many different types of performances, and it is reasonable to expect that the size of the use and non-use values will depend on the types of theaters and performances provided. While it can be expected that some performances exclusively provide pure entertainment to the users, other types of theaters can be expected to provide externalities in terms of benefits that they generate also for non-users such as by providing enhanced prestige, identity, or educational values that benefits the community at large.

Together with my co-author Hanna Nyborg Storm, I have tried to get closer to an understanding of this question by investigating the impact of the types and repertoires of theaters located in a municipality on their contribution to the attractiveness of the municipalities (Bille and Storm, 2022). We used repertoires and classification of type of theater as broad indicators of the types of benefits the theaters provide. These indicators are, of course, only rough indicators.

Table 1 Attractiveness of municipalities and repertoire of theaters, by user status. Source: Bille and Storm, 2022

	Recent users	Past users	Non-users
Repertoire: Drama	1.11*** (0.23)	0.89*** (0.28)	0.25 (0.34)
Repertoire: Children's	0.02 (0.26)	0.31* (0.19)	0.10 (0.36)
Repertoire: Dance	0.22 (0.36)	- 0.62 (0.38)	0.53 (0.40)
Repertoire: Comedy	0.99*** (0.33)	0.79* (0.46)	- 0.63 (0.41)
Repertoire: Experimental	0.65** (0.31)	1.33*** (0.29)	- 0.63 (0.54)
Individual characteristic	✓	✓	✓
N	742	475	286
Pseudo R ²	0.07	0.08	0.02

Dependent variable: Scale from 5=strongly agree to 1=strongly disagree with the statement *The theater/s in my municipality contributes to making the municipality attractive to live in*. Ordered logit estimates. Huber-White robust SEs in parentheses allow for arbitrary correlation of residuals within each municipality. Level of significance indicated by asterisks: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 2 Attractiveness of municipalities and category of theaters, by user status. Source: Bille and Storm (2022)

	Recent users	Past users	Non-users
Category: small theaters	0.18 (0.20)	0.16 (0.20)	0.28 (0.40)
Category: large theaters	1.10*** (0.36)	0.78** (0.39)	- 0.21 (0.52)
Category: theater associations	0.43* (0.23)	0.56** (0.25)	0.27 (0.30)
Category: local theaters (egnsteatre)	0.27 (0.24)	0.21 (0.22)	0.14 (0.36)
Individual characteristics	✓	✓	✓
N	742	475	286
Pseudo R ²	0.06	0.07	0.02

Dependent variable: Scale from 5=strongly agree to 1=strongly disagree with the statement *The theater/s in my municipality contributes to making the municipality attractive to live in*. Ordered logit estimates. Huber-White robust SEs in parentheses allow for arbitrary correlation of residuals within each municipality. Level of significance indicated by asterisks: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Respondents living in Copenhagen, Frederiksberg, and Aarhus excluded from the sample

The results in Table 1 show that the type of repertoire is important for users. For the non-users, the results show no significant relationship between repertoire of theaters and their contribution to attractiveness of the municipality.

A similar analysis has been conducted for categories of theatres (Table 2). Again, we find that the results are explained by user status.

The main contribution of the study is that even though we can confirm that non-users are on average in favor of supporting the theaters through their taxes, the type of supply is of no consequence for non-users. The result raises questions about the use of stated preference methods in valuation of performing arts and similar types of cultural institutions. Stated preference methods build on the assumption that respondents understand and have full information about the good to be assessed, including an understanding of the externalities provided, in order to make their valuation. Our study shows that this may not be the case.

3.1 Possible solutions

The question is: What can we do about it? I will point in two directions to propose some potential solutions. The first goes beyond standard economics and is a value-based approach interpretation. The second approach is focused on further development of the method that involves taking an interdisciplinary approach.

3.1.1 The value-based approach

One possible way forward would be radical in the sense that it leads to considerations of whether the traditional theories are somehow misconceived in this context and should be re-conceptualized by thinking in different ways about the existing preference theory. For instance, we could shift beyond individual self-interest and pay more attention to the arts and culture as goods that are shared and common and consider the willingness to contribute, such as Arjo Klamer and his group of researchers are doing in their development of the value-based approach to economics (Klamer, 2016, 2017).

The VBA builds on the notion of “common goods” proposed by Elinor Ostrom in 1990 and adds the concept of shared goods. Examples are friendship, community, a family, knowledge, art, music, religion and so on. You share the good with other people and you need to contribute toward it to keep it alive. In the VBA, the distinction of “purpose” from instrumental goals is crucial (Klamer, 2017). While utility and preferences are driving consumers’ decisions in the traditional approach, the “purpose” of an activity can be seen as more important in the value-based approach. From the importance of “purpose” instead of “utility” follows the distinction between “willingness-to- contribute” versus “willingness-to-pay,” which is the notion used in standard economics, shared and common goods rely on the willingness to contribute.

In the Danish case above (Bille and Storm, 2022), the non-users’ willingness to pay to theatres through taxes cannot easily be interpreted as a rational decision based on the utility of specific non-market benefits provided. The results lend themselves more easily to a VBA interpretation. The non-users appreciate the theater in their municipality, and they are willing to contribute to it. Their assessment is not based on their utility and calculated benefits toward which they have clear preferences. They are simply willing to contribute to what is perceived as a cultural common good: the theatre in their municipality.

In this context, it is interesting to notice the feedback that we got from our focus groups before the questionnaires were sent out. The most common and general feedback we got was concerning the difficulties the participants had to disclose their WTP for the cultural institutions based on the utility and benefit they got. Several scenarios were tested, including the possible loss of a specific theater or museum in their neighborhood. Most of the participants argued that they would be willing to contribute to the existence of these institutions, without being able to relate their WTP to any specific changes in the supply.

3.1.2 Opening the black box of economic valuation

Another way forward could be to get a better understanding of the types of benefits that cultural goods and activities are providing. To increase our understanding of cultural value, it would be important to understand what people value in articulating the economic valuation of culture, especially in terms of non-use benefits. While economic valuation studies have mainly been interested in the total economic value, the different categories of value and the different components that make up the total value has been much less researched.

This requires an interdisciplinary approach. While arts and humanities researchers have focused on why people value culture and how the criteria of significance are articulated, economists have calculated how much culture is valued. These discourses have not intersected, nor have they overlapped enough to date to fully understand and categorize which aspects of use and non-use value are being captured. Dr. Patrycja Kaszynska from University of the Arts London has been one of the driving forces for this interdisciplinary agenda.

4 Challenge 2: impact on individuals from attending arts and culture and related impacts on society (cultural capital externalities)

The second important challenge I want to address, is how to measure the impact on the individuals from attending arts and cultural events and activities, and the externalities this is expected to generate. These are values, which I doubt can be measured by stated preference methods.

The idea to begin with the individual experience is not new. A central purpose of arts and culture, apart from pure entertainment, is that they give meaning to our existence. The humanities have for a long time argued that the most profound value of arts and culture is related to their importance to the individual human beings who engage with them.

These arguments are in accordance with the most common cultural policy argumentation. A typical argument from the humanities is provided by Tygstrup et al. (2017): *"It is a fundamental assumption in the cultural policy of the welfare state that support for artistic activity creates a society with greater vision, better self-knowledge, more creativity and stronger social ties...Firstly because cultural policy provides increased quality in the environment and experience content for the*

citizens of society, and secondly that it contributes to enlightenment, increased vision and sensitivity, and thereby strengthens the basic democratic formation."

The assumption is that individuals taking part in cultural activities can be enlightened, connected, and empowered among other virtues that the arts generate. This can take the form of better understanding one-self and other people, changed perceptions, increase creativity, aesthetic understanding, social critique, better moral vision and so on. The expectation is that these effects on the individual will ultimately have a wider impact on the society level (social returns) in the form of, e.g., democracy, diversity, innovation and so on (Fig. 1), which in turn are important for the aggregate welfare and/or economic growth. From an economic perspective, the increase in, e.g., moral behavior may strengthen social cohesion and collaboration, which have been shown vital for economic performance (see e.g., Guiso et al., 2006 and Fehr, 2009). While many case studies have been done, very few studies are made at the aggregate level to make it possible to measure the size of the externalities, and the existing examples relate to economic growth (e.g., Bucci & Serge, 2009; Weckroth & Kempainen, 2016).

The logic model in Fig. 1 comes with several important challenges.

Firstly, even though some evidence exists in the form of case studies and qualitative studies, the positive direction of the societal impact is an empirical question which needs to be explored further. Accumulation of cultural capital could potentially also lead to less tolerance, trust, social cohesion, diversity, innovation, etc. (Brook et al., 2020), and it would in addition be important to consider the skewness of distribution of cultural capital among the citizens (Morey & Rossmann, 2003). Secondly, it is important, so consider the different the types, nature, or specific content of the culture being consumed. From a cultural policy perspective, the publicly supported consumption activities such as theatres, concerts, museums, and libraries are expected to provide some positive impacts. However, playing video games, watching TikTok, and viewing particular movies may have positive (or negative) impact as well. At the end of the day, it is an empirical question.

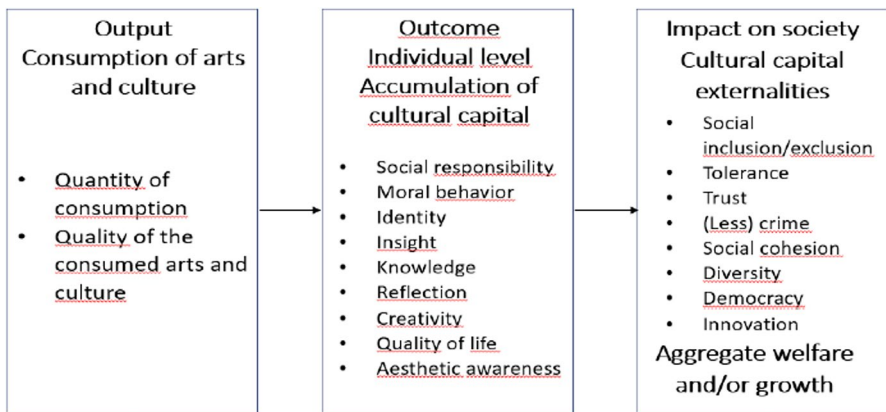


Fig. 1 Logic model: possible impacts on individuals and society

In the following, I will elaborate further on the topic by: (1) Presenting a new concept: Cultural capital externalities, (2) Presenting a formal model, (3) Discussing measurement, (4) Showing a first application of the model, and (5) Pointing toward inspiration from economics of education.

4.1 Cultural capital externalities

In cultural economics, the impact on individuals has been acknowledged in important contributions by Arjo Klamer and others. But these impacts have not yet been formalized or measured quantitatively to any large extent. I will try to get closer to an economic understanding by introducing a new concept, namely cultural capital externalities.

My use of the concept cultural capital is related to Pierre Bourdieu's concept in the sense that cultural capital is embedded in the individual (Bourdieu, 1986). This stands in contrast to David Throsby's concept of cultural capital, where the value is embedded in the cultural object (Throsby, 2001).

I will argue that many cultural activities are impure public goods, where *a privately acquired activity jointly produces a public and a private good*. It will be the case for quasi-public goods, where the private returns make up the largest share of the value, but where there in addition may be some social returns or externalities related to the consumption of the good. For many cultural goods, the value of the good is created when it is consumed, and there will be no (or very little) value without consumption. It is the case for many cultural institutions such as theatres and libraries, and cultural activities such as an exhibition or a concert and so forth, where the value of the good is produced, when it is consumed.

To formally explain the case of cultural capital externalities, I will draw on a model developed by Cornes and Sandler (1984, 1992, 1996) for an impure public good, where *a privately acquired activity jointly produces a public and a private good*.

The typical consumer receives an exogenous money income, Y , and purchases quantities of two tradable goods, labeled X_1 and Z .

X_1 is a standard numeraire private good, the price of which is set at unity throughout. One can think of each unit as generating a unit of a private characteristic, which is also denoted by X_1 .

A unit of Z costs p units of the numeraire and jointly generates β units of a private characteristic, X_2 , together with γ units of a public characteristic, X_3 .

Even without any contribution from himself, the consumer can consume units of the public characteristic, which the individual takes as given, and is denoted by \tilde{X}_3

The consumer's problem is:

$$\text{Max } (U(X_1, X_2, X_3 | X_1 + pZ = Y, X_2 = \beta Z, X_3 = +\gamma X_3)$$

where $U(\cdot)$ is a strictly increasing strictly quasi-concave utility function. In this formulation, the consumer's basic preferences are defined over the three characteristics, and the budget constraint involves the marketed goods.

It means that if the consumer buys a theater ticket at the price p , it jointly generates β units of a private characteristic (the use value), together with γ units of a public characteristic (which are the cultural capital externalities).

γ is the interesting parameter. In the model by Cornes and Sandler, the externality arises immediately upon consumption. However, how the public characteristic is generated is not fully understood and can possibly take many forms. Most likely, cultural consumption will have an impact on the individuals (in the form of knowledge, reflection, identity formation, aesthetic awareness, moral behavior, social responsibility etc.) which can make a change in their understanding or behavior, and through interactions with other people (e.g., through conversations); this can have impacts on others and in the end produce social returns.

The idea is that when private consumption of arts and culture is taking place, then, the individual will accumulate cultural capital. This cultural capital can lead to changed behavior and decisions and impact other people, and thereby producing cultural capital externalities. These cultural capital externalities can take many forms, as noted before. But we will expect the cultural capital externalities to increase with the level of consumption of cultural goods, especially when the quality of the cultural goods increases beyond pure entertainment effects.

Theaters are a good example. Attending a performance is mainly a private good with obvious private benefits. Via the accumulation of cultural capital that the theatergoer can acquire, externalities can arise through changed behavior, decisions, and interaction, and this can have an impact at the level of the society. *Without the consumption by the users, no externalities are produced.*

An open question, which needs to be further reflected upon, is which aspects of the accumulated cultural capital are public benefits, or and which aspects can be internalized by the consumer? A person with a higher cultural capital might be able to get better paid at work and in that way internalize the capital.

The model by Cornes and Sandler (1984, 1992, 1996) has, to the best of my knowledge, not yet been applied to cultural goods. While many case studies have been done, very few studies are made at the aggregate level to make it possible to measure the size of the cultural capital externalities.

4.2 Measurement

One possible way forward can be to look at variation across geographical entities, either municipalities, regions, or countries, and try to make an empirically convincing set-up, where it is possible to test the following hypothesis:

H_0 *The higher level of cultural consumption/participation, the greater aggregate cultural capital, and the greater the cultural capital externalities.*

It is furthermore possible to test the relationship without opening the black box on outcomes at the individual level, if the following presumption is made:

The aggregate effects on the individuals participating in beneficial cultural culture activities will increase as the number of participants increases.

It means, that if the number of individuals participating in beneficial cultural activities is increasing in a community, we would expect increasing aggregate cultural capital, which in turn is expected to lead to greater cultural capital externalities.

This is of course not straightforward to test empirically, as there are many confounding factors, and it can be difficult to prove causality. The content or “quality” of the arts and culture consumed is furthermore an important factor (Elisassen et al. (ed.), 2018). But the hypothesis must be treated as an inherently causal question.

We have made a first try to test the model in Denmark with theatres as an example (Honoré & Bille, 2022). In the study, we used the variation across Danish municipalities in terms of aggregate theater demand and the average willingness to pay to theatres through taxes within a municipality as our main variables. The average WTP in a municipality was used as an indicator of the size of the cultural capital externalities. To deal with endogeneity problems, we used a Danish ticket purchasing scheme as the basis for our instrument.

Table 3 shows our main results. The social returns are insignificant in our main specification and likewise in the sub-sample of non-users. But in the sample of users, we find a large and significant social effect of 2.4 percent.

Our study shows that it is possible to test for the existence of externalities in cultural consumption in an empirically convincing causal set-up. To the best of our knowledge, our study is the first study trying this approach. We find that there are significant cultural capital externalities for users, but we find no effects for

Table 3 Estimates for the external return to theaters allowing for variation across regions. Source: Honoré and Bille (2022)

	OLS	2SLS	
	(1)	(2)	(3)
<i>(a) Full sample</i>			
External return	0.418 (0.312)	0.637 (0.686)	0.374 (0.441)
F-statistics		6.326	840.3
Excluded-instruments		9	36
<i>(b) Users</i>			
External return	0.922** (0.428)	2.411*** (0.880)	1.388** (0.617)
F-statistics		7.292	293.1
Excluded-instruments		9	36
<i>(c) Non-users</i>			
External return	-0.065 (0.386)	-1.191 (0.902)	-0.725 (0.532)
F-statistics		4.650	184.3
Excluded-instruments		9	36
Structural-covariates	✓	✓	✓
Individual covariates	✓	✓	✓
Municipality covariates	✓	✓	✓

Standard errors corrected for clustering in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

non-users. Intuitively, these results seem reasonable. The users are more familiar with the theatre good, and therefore, they may be better equipped to evaluate the benefits. Another reason could be that what we find is simply network or peer effects (Sacerdote, 2011). The users can benefit from having many other users in their community, as they will have more people to talk to about and share their theatre experience with.

We have used WTP as a measure of the size of the externalities, which is not ideal, as it replicates the problems with WTP as an indicator of non-market values. A future challenge is to find better impact-measures at the level of society.

4.3 Inspiration from economics of education

The *cultural capital externalities* resemble *human capital externalities* in the economics of education, where the value of schooling can be divided into private returns and social returns (Ciccone & Peri, 2006; Moretti, 2004; Winters, 2013).

The data and methods vary, but I will give a few examples. Acemoglu and Angrist (2000) have in a large study measured the size of human capital externalities. By using the natural experiment of the compulsory schooling laws in the US, they are able to estimate the private return and the social return to schooling. The private returns are measured by the increase in individual earnings, and the social return to schooling is measured by the increase in total earnings. The authors find that the external returns are of the magnitude 1–3%, and this magnitude is “sufficient to justify public subsidies for education”. Another study by Bell et al. (2022) has used the change in the compulsory schooling laws in the US to study if increased education can explain a reduction in crime.

In both cases, education is an impure public good, where the activity (schooling) produces a private good (education) and a public good (increased aggregate income or reduction in crime). While the human capital externalities of education can be measured as increased productivity and income, the cultural capital externalities are ‘softer’ and related to societal impacts, which can be difficult to measure.

At this point, we can revisit Richard Florida’s most influential, but also heavily criticized “Theory of the Creative Class,” where according to Florida cultural activities, openness, and tolerance attract members of the so-called “creative class” and create economic growth (Florida, 2002). The main critique has been related to lack of causality in the empirical testing. Apart from this important point, there are some similarities, but also some important differences.

Firstly, Florida begins with the importance of an open, tolerant, and diverse society, but he is not very specific on the cultural activities which help create an open society. Secondly, Florida is interested in economic growth and not in understanding the value of different types of cultural goods and externalities.

What I am interested in, is an investigation into the types of cultural activities which have a profound impact on the individuals participating, and the wider impact on society, which I call cultural capital externalities. If we can show that these exist, they may provide the basis of important arguments in favor of public support to arts and culture and to inform cultural policy.

5 Summing up: different types of cultural goods

Summing up, I think we need to treat cultural heritage and cultural institutions or activities differently (see Table 4).

Cultural heritage has many similarities with environmental goods. Tangible cultural heritage such as old buildings, castles, churches, monuments, and archeological artefacts are examples of pure public goods (at least if they are watched from the outside). The benefits are mostly related to the *level of supply* and can take the form of existence and bequest values. In this case, non-market valuation methods such as stated preferences are well suited to measure the size of the public benefits provided. Valuation of a heritage good and the related benefits can relatively easy be described to the respondents in a scenario of the type: restoring or not restoring (to a varying degree) some cultural heritage asset.

For cultural institutions and related activities, such as theatres, libraries, exhibitions and concerts, the use value is the most obvious benefit. The externalities are produced, when the good is consumed and is expected to increase (or decrease) with the *level of consumption*. When these cultural capital externalities are one of the most important non-market values, it creates challenges in terms of the possibilities for using contingent valuation studies as a measurement tool. It is almost impossible to design a valuation scenario with the intention to explain the externalities of, e.g., a theatre to the respondents, and to explain how the externalities will change with a change in the supply or consumption of theatres.

Therefore, other valuation methods (like causal analysis) will be needed if we want to measure the size of the social returns. Here, we can find inspiration in economics of education.

Museums represent a mix of the two types, as some of the benefits are expected to exist independently of the consumption, while other are expected to vary with the level of consumption (Fig. 2).

Museums normally have obligations in terms of collecting, preserving and registration as well as doing research within their specified domain. These activities are a public good which can provide benefits to the users and non-users in terms of existence value and bequest value, by keeping and preserving cultural heritage.

Table 4 Different types of cultural goods

	Cultural heritage	Cultural institutions and activities
Type of good	Public good	Quasi-public good
Most important type of value	Non-use values	Use values
Value related to	Supply	Consumption/participation
Stock/flow	Stock	Flow
Non-market benefits	Existence and bequest value	Cultural capital externalities
Measurement	Stated preferences	Causal analysis
Inspiration from	Environmental economics	Economics of education

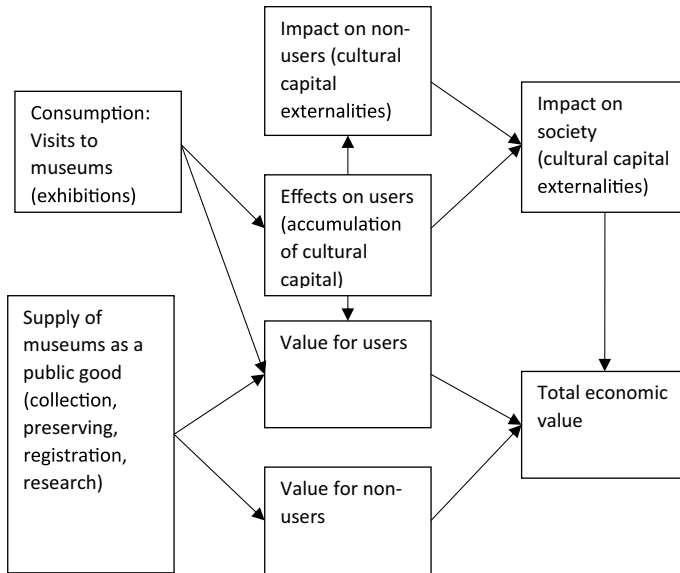


Fig. 2 Values of museums

Furthermore, a museum makes exhibitions and disseminate arts and cultural heritage and produces knowledge that enriches society. The exhibitions provide benefits and use value to the visitors, but not at first glance to the non-users. However, a visit to a museum may accumulate cultural capital when the users are enlightened and empowered, and this can in turn have wider impact on the non-users and on the society in terms of cultural capital externalities.

In this way, museums resemble universities. The research at universities is a public good, but the teaching and educational programs are basically a private good, but a private good with human capital externalities where the private return and the public return to education has been empirically investigated in a vast literature.

6 Final remarks on cultural policy

Finally, I will return to my initial remarks on the interest and concern in cultural economics about finding a rational and guiding principles for government support of the arts and culture.

In Denmark, 40% of the public support for arts and culture are spent on three types of cultural institutions, namely libraries, theatres and museums, and further about 25% is used to support public TV and radio (Bille, 2022). Similar priorities can be found in most Western countries. In other words, the majority of the public support is spent on cultural institutions, where most of the value is created when the output of these institutions is consumed. The main argument for this policy is the positive impact on the individuals using the cultural institutions (Tygstrup et al.

2017), and the wider impacts this is expected to generate at the level of the society (the cultural capital externalities).

I do recommend that research in cultural economics works with these questions and tries to find new ways to empirically investigate the existence and size of cultural capital externalities. These externalities are truly important for our understanding of the values of arts and culture and in terms of providing guidance for cultural policy decisions.

The cultural sector is in motion. The classic cultural institutions are being redefined and new types of institutions have appeared. Digitalization and mediatization, including social media, blur the boundaries between producers and consumers, and create new types of artists, new art forms, new arenas and new forms of cultural communication, consumption, and identity formation. While huge changes have taken place in the society, cultural policy has been surprisingly stable. What do these transformations in society entail for cultural policy?

In my opinion, the concern in cultural economics about finding a rationale and guiding principles for government support is more important than ever. Understanding and measuring the values of arts and culture and the related normative arguments for public support are really challenging research agendas—but also extremely important. It is my hope that young scholars doing research in cultural economics, will continue to develop the field—and will be able to provide new answers and ways of guiding cultural policy in the future. I hope that the concept of cultural capital externalities can provide inspiration for future work.

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Declarations

Conflict of interest The author has no conflicts of interests to declare.

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