Education and preference-creation in American art museums from the perspective of welfare-enhancing consumption

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Abstract

Some economists believe that not enough fine art is consumed due to incompletely-formed preference bundles. Museums now offer educational programs in addition to exhibits. Given a set of resources available to a museum, this paper makes the argument that trading-off some exhibition expenditures for educational programs may be current-generation welfare enhancing by reducing the cost of consuming art as an experience or novelty good. We also analyze empirically, unique to the literature, to what degree the USA's "top" not-for-profit museums are fulfilling their public purpose in relation to education programming, in that these museums gain considerable tax advantages as are exempt from federal (and thus local) income taxes and local real estate taxes.

Keywords Art museums, Intergenerational equity, Education, Preference creation, Not-for-profit organizations

JEL Classification Z11, D11, D63, P46, H23

The yearning for new things and ideas is the source of all progress, all civilization; to ignore it as a source of satisfaction is surely wrong –
Tibor Scitovsky (1988, p. 5)

Introduction

There is no consensus agreement amongst cultural economist or museum professionals as to exactly what is a museum.[1] There is disagreement over what a museum's purpose should be, what the functions of a museum are and should be and how each of these functions should be prioritized and actualized, and how therefore one can accurately measure the performance (both socially and economically) of a museum.[2] For example, do museums exist to preserve built culture for future generations? To collect and exhibit works of art to connect current generations with the past? To attract visitors and economic growth? To fulfill a "public good" role by stepping-in where the market can't to make art available to everyone?

In a world of limited resources it is obvious that these goals for a museum can be in conflict. For example, there is a trade-off of spending priorities for current programs versus the preservation of culture for future. If a museum's

[1] Elizabeth Merritt states in American Association of Museums (2006, p. 1), "In the grand American tradition of self-determination, pretty much anyone who wants to call his establishment a museum can do so. And often does." Further, "First, you can't really define museums; at least, there is no definition that can be used consistently to include or exclude organizations from the ranks….The definitions agree on a few key points: museums are educational in nature, they are open to the public at least part of the year. But consensus quickly breaks down" (AAM 2009, p. 1).

[2] See Grampp (1989) for a discussion on the competing priorities and functions that a museum faces. Some of these competing priorities within individual museums are resolved by an institution's articles of incorporation and mission statement, as then interpreted by a board of directors, or, by political representatives if it is a public institution. Nonetheless, museums as living entities need to change with demand, just as any institution must to remain socially relevant. Johnson and Thomas (1998, p. 78) write, "Museums are not immune from the forces of market competition….Fashions and tastes change, unless a museum adapts through time it is unlikely to maintain its visitor attractiveness." Towse (2010, p. 248) states that museums might be viewed as a "multiple output firm".

limited resources are used for preservation then, one of the opportunity costs is expenditure for exhibitions.

This paper is an exercise in, for a lack of a better word, "positive", economics where we evaluate the spending priorities as they currently exist for the top museums in the United States. Our concern is to what degree a museum prioritizes the 'public purpose' aspects of expenditures for current generations given a museum's existing constraints and competing priorities. We do not delve into "normative" economics by adding more to the discourse on whether the arts *ought* to be publically-funded and how and by whom, but explore empirically how museums view themselves *as is* in the provision of their services.

Consumption and the "finer things in life"

Tibor Scitovsky in his classic *The Joyless Economy: An Inquiry into human satisfaction and consumer dissatisfaction* (1976) wrote that individuals do not consume enough "novelty" goods in their consumption bundles and instead prioritize less risk-averse consumption for comfort. This leads to in the long-run an under-consumption of the finer things in life such as art, music and literature. Scitovsky (1976, p. 4) asks, "Could it not be that we seek our satisfaction in the wrong things, or in the wrong way, and are then dissatisfied with the outcome?"

Beauty is in the eye of the beholder and is subjective by nature. Throsby and Withers (1979, p. 6), when discussing the performing arts, write that while the value of art and what constitutes art is ultimately one of subjective judgment, some appreciation of the arts can only come through experience, "it can be claimed that what constitutes a demand for aesthetic quality *in this area* as opposed to others is aesthetic judgment based on acquired taste and not simple opinion". For these cultural economists, and there are others with the same view, the reason for the under-consumption of art is due to the lack of adequate preference-formation for art consumption by the 'average' person who is under-educated in the arts.

If we view art as an experience good, which carries a risk-premium or risk-hurdle in preference-formation, then museums might play a role in reducing this risk, the opportunity cost of consumption, by making current expenditures on educational programs for those whose preferences for art are incompletely-formed. Thus education expenditures as opposed to exhibition expenditures by museums

might be viewed as a transfer of equity[3] to those whose preferences for art are not yet formed relative to those whom are already consuming art. This notion of equity-transfer is relevant for museums in the USA because they receive tax-benefits and/or direct government funding relative to other institutions due to their defined public purpose. The next sections of this paper survey and place in context for our research the idea of intergenerational equity for museums, followed by a discussion specifically on current-generation equity. After this theoretical context we introduce our survey methodology and findings. After concluding we discuss opportunities for further research.

Relevant issues in the political economy of art museums related to our research

Tax exemptions for not-for-profit organizations

In this paper we focus on specifically the top not-for-profit art museum in the USA (see the later section on survey methodology, including what constitutes a "top" museum). The reason for choosing this subset of museums for analysis is that not-for-profit museums explicitly are chartered for a public purpose and therefore, one might assume, need adapt their spending priorities for this purpose. The Internal Revenue Service (IRS) of the United States spells-out the requirements for an organization to be registered as a not-for-profit organization.

> The exempt purposes set forth in section 501(c)(3) are charitable, religious, educational, scientific, literary, testing for public safety, fostering national or international amateur sports competition, and preventing cruelty to children or animals. The term *charitable* is used in its generally accepted legal sense and includes relief of the poor, the distressed, or the underprivileged; advancement of religion; advancement of education or science; erecting or maintaining public buildings, monuments, or works; lessening the burdens of government; lessening neighborhood tensions; eliminating prejudice and discrimination;

[3] We are using the term "equity" in this paper as an ideal-type of fairness in the interpersonal distribution of economic resources in society, what Rawls (1971) would call *distributive justice*.

> defending human and civil rights secured by law; and combating community deterioration and juvenile delinquency.[4]

Art museums might be said to fulfill the "educational" requirements for tax-exempt status, and, tangentially perhaps, the scientific and literary purposes. However it is clear that education is the most applicable public purpose category for art museums to be granted the tax-exemption.[5]

It is well-known that not-for-profit organizations in the United States receive many indirect subsidies due to their tax-exempt status. O'Hagan states that the deduction for charitable contributions is the most pronounced tax benefit given to not-for-profits in the USA, followed by the property tax exemption and the capital gains benefits for donations. "Most of the tax measures in the United States have particular relevance for art museums and as a result they appear to be the most favoured arts institutions in this regard" (O'Hagan 2003, p. 452). This benefit can of course can be witnessed on Museum Mile on 5th Avenue in New York City along Central Park (prime real estate indeed) where one can find the Museum of Modern Art, the Metropolitan Museum of Art, the Jewish Museum, the Guggenheim Museum, the Museum of the City of New York, the Museum of Arts and Design and the Frick Collection, amongst others, all not-for-profits and all but the Met and the Jewish Museum founded after the permanent introduction of the income tax in the US in 1913.

Museums and "the market"

There is a common thread in the economics of art museums that these institutions tend to consider themselves immune to market forces. Grampp (1989, p. 189), who introduced this insight into the literature, makes the case that museums are by their nature opposed to market forces, "the aversion of museum people to the market shows itself in various ways", including that the people who

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[4] Taken from http://www.irs.gov/charities/charitable/article/0,,id=96099,00.html, accessed 4 April 2010. Form 990 under which not-for-profit organizations report to the IRS annually does not require a line-item reporting of expenses for educational activity.

[5] In their 2008 survey and statistical reporting exercise the American Association of Museums (2009) reports that there are 17,744 museums in the USA (p. 9), approximately 16% of these are art museums (from data on p. 23: 2754 art museums/17,744), of which 76% are not-for-profits (p. 30).

staff and run museums are scholars and art experts and wish to pursue their craft as opposed to run programs for the public. Towse (2010, p.249) also uses Grampp to show that museum boards also have a tendency to block market demands on museums, "Moreover, he [Grampp] also points out that the prominent businesspeople who act as museum trustees on the boards of museums, who are often major donors to the museums and stand ready to assist it in time of need, also fail to 'direct their museum along the path of efficiency'". A main reason for this immunity to market competition is that the value of museum collections are not accounted for in a museum's Balance Sheet, something which prevents an honest discounting of a museum's capital in relation to its sources and uses of funds (a topic we revisit in the section of this paper on the difficulties of measuring a museum's performance).

For the purposes of our paper moving forward then we find that museums have an innate tendency to prioritize future generations over current generations. We would expect this anti-market bias to be less so in not-for-profit as opposed to government-owned museums, as the former after all depend on direct private voluntary support and thus are more likely to be influenced by decentralized public demand for providing a public purpose at the local level, not least due to their need for new private donations for continued operations as opposed to an on-going line-item in a centralized appropriations process.

The political pressure to resist change for government-owned, as opposed to not-for-profit, museums is expressed by Towse (2003, p. 6).

> This [direct government subsidy of arts organizations] can easily mitigate against artistic [or in our case bureaucratic] innovation, especially when the organization is publically owned and staffed by state employees who favour old routines. The durability and size of an organization also determine the amount of attention it receives and the political pressure it can deploy when threatened with a reduction in public subsidy.

It should be noted that this bureaucratic inertia for government-owned and operated museums has been recognized and is being addressed. Throsby (2010, p. 73) notes that museums in the Netherlands have been increasingly turned into "hybrid" institutions where the State retains ownership but, "the programme of re-establishing national museums and galleries as autonomous and independent business units is well underway….the institutions are freed up to be more flexible,

responsive, dynamic and entrepreneurial in the operation of facilities and in the delivery of services to the public".[6]

Is art really for "the rich" and should we care?

An additional common thread in art economics is that the consumption of fine art tends toward those better-off and towards those whose preferences for art are already formed (the latter finding of course arguing for the importance of education in preference-formation). Johnson (2003, p. 316) has found that people who visit museums "tend to be drawn disproportionately from higher-income and better educated groups" with his data source being for the USA and further that many museums rely on 80 to 90 per cent of their visits as repeat visits. Goetzmann *et al* (2010, p. 25) make the case that historical increases in inequality are correlated with increases in at-market prices for museum-quality art, that "indeed it is the wealth of the wealthy that drive art prices." This implies that the tax exemptions for not-for-profit museums in the USA are a transfer to the wealthy, and that therefore any educational programs a museum sponsors which reduces this reverse-subsidy is clearly an increase in current-generation equity.

However, the belief that art is for the wealthy is not a universal consensus. This result has been disputed by Halle (1993) who finds, again for the USA, that both the "rich" and the not "rich" consume abstract art at home, and, by Luksetich & Partridge (1997), also for the USA, who fail to find a correlation between income levels and art museum visits, stating that the opportunity cost of a wealthy person's time can crowd-out his or her preference for art consumption.[7]

[6] A brief mention of art museum effects on 'economic development' should be made. Towse (2010, ps. 283) states, "Moreover there is a tendency to assign to a cultural project external benefits that would have accrued to any other project with the same outlay. As a result, economic impact studies acquired a bad name, not least with government economists, and there has been a tendency recently to write them off". Furthermore, "In fact many economists think that the national multiplier is indeed close to one, and that claims for significant induced income are exaggerated" (p. 285). This is doubly true with art museums, Luksetich & Partridge (1997) find that art museums are the least attended museum type per capita, with zoos being the first followed by science, general, natural history, and historical museums.

[7] The Eurobarometer 2007 survey finds that "managers" attend museums more often than do "manual workers", 68 percent versus 38 percent (Towse 2010, p. 240).

In this paper we avoid the debate as to whether or not museums are (only) for the rich and view art as an experience good, with the preference for art consumption being a good into itself, following Scitovsky (1988, p. 5), "Culture comprises some of the best, most valuable things life has to offer." Therefore museum expenditures for preference-formation (education) versus those for the exercising of already-existing preferences (exhibitions) increase equity when we view art consumption as a good, whether or not these preferences are held by any member of any socio-economic category.[8] This method of analysis might be one of 'methodological individualism' but not one of consumer sovereignty in that we are arguing for a publically-funded role for preference-creation, given the existing tax-subsidization of not-for-profit museums in the United States. Whatever its methodological limitations this positive approach allows us to evaluate how well not-for-profit museums are fulfilling their public purpose.

The difficulty in measuring performance of art museums

Many cultural economists have written on the competing demands on art museums and therefore the difficulty in measuring performance. Paulus (2003, p. 51) states, "a museum cannot be reduced to one function; its three basic functions are research, preservation and communication". There are choices to be made between these competing goals. Expenditures for each could be reported, expenditure relative to revenue giving a measure of performance, but what is to determine the right trade-off between them?

Grampp (1989, 1996) is known for lamenting that museums are not required under generally-accepted accounting principles to report on the value of their collections, and thus do not report the capital costs related to these collections. After all, if it is not measured it cannot be reported let alone be evaluated.[9] A

[8] The implicit assumption here is that the welfare gain of higher utility ("finer things is life") consumption of those receiving education at a museum more than outweighs the welfare loss of reduced current exhibition programs at the museum to be enjoyed by those whose preferences for art are already formed. Corollaries to this assumption are; 1) there exists viable almost perfectly substitutable art enjoyment opportunities besides the museum for those whose taste for art is already formed, and 2) that there may be positive social spillover effects of *additional* people enjoying art for those who *already* enjoy art, implying "overlapping utility functions" for art consumption.

[9] Museum economic mismanagement of collections should not be overstated. Many museum do sell (economically value) their artworks, especially during today's Great Recession **(**see Pogrebin

corollary to this then is that this value, this opportunity cost, of a museum's collection, is understated in a museum's decision-making, and therefore a collection is not displayed to the public as much as it would be if its economic value was internalized by museums, this is the well-known Prado Effect as originally articulated by Alan Peacock. Grampp (1989, p. 202) writes that "more than half" of museum collections in the US are in storage.[10]

This phenomenon of collection "hoarding", like the public choice 'anti-market' tendency for museum personnel discussed above, shows the inherent tendency for art museums to prioritize the conservation of (or in this case collection of) built heritage relative to expenditures for current generations. These endogenous incentives themselves create spending priorities prioritizing future generations over current generations but do not in themselves determine if it is "the right thing to do".

Most if not all museums report attendance figures in their annual reports so attendance has become *de facto* a positive measure of museum performance, however as discussed above, much (most) of this attendance is repeat attendance. Thus how well does attendance measure public purpose? And as has been well-documented (see, i.e., Bailey & Falconer 1998) there is a trade-off between charging for admission, using a cost-recovery basis or not, and reduced or free admission for special socio-economic categories, itself an equity trade-off.[11] Some of this is site-specific, for example, the Brooklyn Museum, a not-for-profit, requests a "recommended" admission fee, because it is located on city-owned land

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2010**),** and report these sales in their financial statements as current revenues. In addition new acquisitions are more often than not highlighted in museum annual report, albeit not necessarily with the purchase price. Prommerehne & Feld (1997) find that public museums pay more for paintings at auction than do private individuals.

[10] A visit by the present author to the Man Ray retrospective at the Jewish Museum in New York City in March 2010 revealed that the museum was displaying none of its paintings, despite selling a book of its fine painting collection in the gift shop.

[11] Darnell (1998), for example, analyzes the difficulty, and cost, associated with attempting to use price elasticity of demand market segmentation-type strategies for the pricing of museum visits. Luksetich & Partridge (1997) in their econometrics work find that the demand for museums is price inelastic and believe that "doubling the price increases admission revenue by 50%" (p. 1557). AAM (2009, p. 67) reports that 48% of art museums charge a general admission. Some museums have a "Tuesday Free" day or the like where "free" means the cost of congestion, a movement Towse (2010, p. 242) likens to market segmentation based on 'willingness-to-pay'.

and therefore is not allowed under law to charge admission.[12] If the idea is to maximize attendance then of course free admission is the answer, but if the goal is to measure consumer demand and earn revenue then it is best to charge an admission and report these proceeds as revenues. Again competing priorities mean competing and conflicting performance measurements.

The American Association of Museums (AAM 2009) in their periodic surveys of museums report 39 financial ratios to evaluate museum financial performance. These range from "museum-related activities as percent of total operating expense", "$ spent per museum visitor", "$ raised per visitor", "income from private sources as percent of total operating income", and "building operations cost per sq. ft. of interior space". Again given the heterogeneity of the missions and geographical locations of museums in the US it is hard to see what makes for a 'universal' analysis of performance. (For example, is it reducing costs? Not if our donors have given money specifically to support certain costs. How do you compare relative building or labor costs between Omaha and San Francisco?) The AAM financial ratios are reported per museum type (botanical gardens, art museums, children's museums, general museums, historical sites, historical museums, natural history/anthropology museums, science museums, specialized museums and zoos) as well as in aggregate so no doubt the per-type reporting is helpful for museums to compare their ratios with their colleagues, but still does not give prioritization for competing expenditure categories, and this is, no doubt, a good thing given even differing institutional mandates within like-types.

Pignataro (2003, p. 371) states the dilemma and the 'problem' with performance measurement, which includes problems of both comprehensiveness and the distortion of governance incentives.

> There is no such thing as 'the performance' of cultural institutions, or of the whole sector. There are different aspects of performance that can be evaluated also with the help of numerical indicators, but none that can provide an exhaustive representation of the functioning of arts organizations.
>
> Performance indicators need to be used with great caution….Once used, indicators are not merely a computation exercise, since they tend to affect the behavior of institutions according to the incentives arising from the prediction about their possible utilization.

[12] Schuster (1998) states that perhaps it is best to view (some) museums as "hybrid" institutions, without a neatly-defined public or private governance structure.

Finally, Towse (2010, p. 252) states that ultimately the measurement of performance is a cost unto itself, "Policies have to be costed directly by the responsible authority or, ultimately by their opportunity costs." In our paper we take these problems with performance measurement to heart. Not-for-profits in the USA ultimately have to conform to their chartered public purpose under the tax code and our measure of current-generation equity (of reported 'performance' if you will) are stated *as is* in the audited Financial Statements for each museum surveyed. We are not recommending normatively that museums prioritize one type of expenditure over another, merely reporting on what are current practices.

Intergenerational equity and art museums

One of the conclusions which has resulted from the above discussion is that museums make intergenerational equity decisions by trading-off spending on current generations for spending on future generations, and, that there are spending trade-offs within the current generation.

We will define these "equity" decisions as follows:

1) Given a set of resources, museums can spend for current *or* for future generations. This spending decision can be seen as an **intergenerational** equity decision. Spending for future generations includes research and collections acquisition and preservation, while current-generation spending includes exhibitions and education.[13]

2) Given a set of resources for current generation spending, museums can spend on programming for those whose preferences for art consumption are already formed, *or*, for those whose preferences for art have yet to be realized. This spending decision is a **current-generation** equity decision. The trade-off for current-generation expenditures is *between* exhibitions and education.[14]

[13] Throsby (2011, p. 279 states, "His [John Ruskin's] consideration of art as a long-lasting store of value was motivated by his concern to preserve the treasures of the past for the benefit of the future, what we now know – especially in the management of natural capital – as intergenerational equity."

[14] It would be more correct to separate-out children versus adult education expenses, with the former part of intergenerational equity, however, unfortunately, museums who report educational

Intergenerational equity is, of course, deemed by many cultural economists as an important function for museums.[15] For example, Paulus (2003, p. 51) writes "a central function of a museum is the acquisition, preservation and restoration of objects for the benefit of future generations". In fact the public choice reasons for museum personnel prioritizing the future over the present are justified by David Throsby (2003b, p. 184), "In quantitative terms, respect for intergenerational concerns might suggest adoption of a lower discount rate than might be otherwise accepted on time-preference or opportunity cost grounds in the process of reducing both economic and cultural benefit streams to present value terms for any project involving cultural investment".

However, Throsby further states that current-generation concerns need be balanced with intergenerational concerns, "This principle asserts the right of the present generation to fairness in access to cultural resources and to the benefits flowing from cultural capital, viewed across social classes, income groups, locational categories and so on" (2003b, p. 185). And, "most museums rank their educational mission amongst their highest priorities, whether it is pursued through general exhibits open to everyone or through specific programmes targeted at young people" (2010, p. 123). Again it is a question of decision-making within each museum on how these trade-offs are realized.

The next section of this paper explores the economics of current-generation spending where we find that museums face spending trade-offs between those whose preferences for art are already formed (exhibition expenditures) and those whose preferences for art are yet to be formed (education expenditures).

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expenditures in their audited financial statements do not go into this level of detail. AAM (2009, p. 83) reports that 93% of art museums have separate education budgets of which a median of 59% goes toward K-12 education.

[15] The AAM (2009) deems the preservation of collections as a measure of financial performance, with one of their 39 key ratios being "collection care expense as percent of total operating expenses" (p. 19) with the median expense ratio being 6% (p. 80); 86% of art museums own a collection (p. 80). The greatest cost for art museums as reported in the AAM survey exercise is "personnel expenses" at 49% of operating expenses (p. 78).

Current-generation equity and preference-formation as welfare-enhancing

In saying that art education can be welfare-enhancing we are implicitly assuming that people are born with the ability to appreciate the aesthetic experience.[16] Education in this sense then is not so much taste-creation but rather preference-formation. Denis Dutton in *The Art instinct: Beauty, pleasure & human evolution* (2009) uses the work of David Hume, in particular "Of the Standard of Taste" (1757), to propose that all humans have a predisposition towards art appreciation and it is only through error (and/or mistake in judgment) that tastes differ.[17] Dutton states,

> Judgment can also fail because it is insufficiently practiced in actively experiencing and criticizing works of art….This fault goes along with unfamiliarity with a wide comparison base on which to make a judgment (the man who has only seen two operas in his life in not is a position to be an opera critic) and prejudice against an artist, or, perhaps, the work's cultural background" (p. 36).

Grampp (1989, p. 76) further clarifies how consumption preferences for art are created, or, more specifically, how they are changed as price and income change. Our concern in this paper relates to the 'price' of this preference for art and how this price is reduced through education.

> The preferences which people have among styles of art depend on what they bring to it: their sensibility, understanding, knowledge, what tolerance they have for the unusual and the novel, how willing they are to risk disappointment, etc. These properties come together to form taste, and they are the product of intentional effort combined with the

[16] Our approach of assuming, like Hume, that people are born with innate tastes for art is not accepted by all cultural economists. For example McCain (2006, pp. 161-2.), "The domain-specific knowledge and skills necessary for creative consumption of art are together known as 'taste', and are something not given but acquired….We can accept the idea that artistic products are stimulus [novelty, *sic*] goods whether or not we endorse Scitovsky's hypothesis of an innate need for stimulus". For our purpose here, we are defining "taste" for art as something belonging to the aesthetic nature in all of us, and where this taste is *realized* in the economic realm as part of a consumption preference-bundle. The approach in this paper is also in alignment with Carl G. Jung who posits that certain signs and symbols (the basis for art) are common to all humans.

[17] How Hume's theory of the Test of Time for good art can be juxtaposed with the museum curator as expert has yet to be addressed, at least as far as is known by the present author. Currid (2007) would call the museum curator a "cultural gatekeeper".

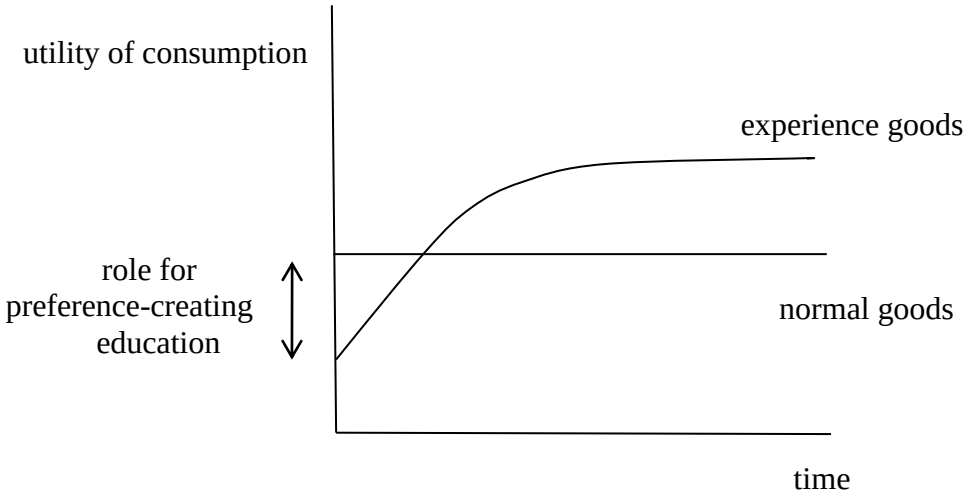
> circumstances in which the effort is made. It is what I have called investment in taste. Taste governs the choices the individual makes, once prices and his income are given. But investment in taste is affected by income and prices, and taste changes when they change.

We can view then the consumption of art as something formed over time, or in economic jargon, as an experience good, which has a risk (a price, or even an investment hurdle) attached to its initial consumption. Scitovsky's theme in *The Joyless Economy* is there is an inherent discomfort level attached to consumption of the novel which can be alleviated by reducing the risk associated with this consumption. Art is a novel consumption good with a risk attached to its initial consumption by those who have yet to exercise an innate taste for art. People consume "art as experience" and the museum is a service-provider.

In Figure 1 we see the relationship between normal goods (Scitovsky's 'comfort goods') and experience goods (Scitovsky's 'novelty goods'). At one point (time = 0) an under-educated "average" potential consumer of art (and again according to Hume we are all art consumers, even those of us whose preferences for art are yet to be realized) has preferences for experience goods below his or her preferences for normal goods due to the subjective risk-aversion against the new.[18] An under-educated person is not "maximizing consumption", to borrow a phrase from Samuelsonian economics. Education can create preferences, which will allow an increase in utility due to reducing the initial costs of consuming the novel.

[18] We can also, instead of viewing Figure 1 as an *individual's* utility-map, consider the utility-map as one aggregated for a community. See fn 8 on overlapping utility functions, a theoretical concept most often attributed to Thorstein Veblen (1899).

Figure 1 Experience goods and taste-formation (Source: Lévy-Garbona and Montmarquette 2003, with additions by author)



The "price-gap" for art

It follows that a 'public purpose' role for museums is in preference-formation through educational programs which reduce the risk associated with art consumption and which might improve consumption utility for the average (under-educated) consumer. Museum education programs it may be proposed move the average consumer upward along the vertical axis, allowing the consumption of art as a preference-choice to equal that of the opportunity cost of the consumption of normal goods. In other words, museum educational programs can reduce the "price-gap" between normal and experience goods and set the consumer along a path where art can form part of his or her consumption bundle. This new consumption path has the potential for bringing increasing returns to scale for consumption utility relative to the constant returns to scale of utility for normal goods. There are increasing utility returns to consumption of experience goods over time, up to a certain point, at which point there are constant returns.

However, following Scitovsky, we may find that the utility of consumption for these 'finer things in life' remain at a higher absolute level relative to the consumption of normal goods; consumption for (some) novelty goods has replaced consumption for (some) comfort goods.

As shown in Figure 1 it is this movement along the vertical axis for the average person (under-educated in terms of art) which creates an increase in current-generation equity. Those who already are consuming art already experience a higher level of utility than the average person. By shifting expenditure from exhibitions to education at the margin, museums increase equity through creating a preference for art consumption for those whose tastes for art are yet-realized in the economic sphere. In the next sections we apply this theoretical foundation to museum practice as it exists today.

Survey methodology and results

The "top" museums in the USA

For our paper we are evaluating the "top" museums in the United States, which of course, is a subjective judgment. Is a "top" museum the big museums in the metropolitan centers, which attract the wealthy (and relatively, it is the wealthy who live in the major metropolitan areas where the cost of living is higher than average) and tourists living out of their day-to-day existence? Or is it indeed the local, smaller museums, who are more accessible to those living more 'average' lives and whose local museums may be more apt to cultivate a day-to-day appreciation for the arts?

For our empirics we have chosen to define a "top" museum by a museum's attendance[19] and their ability to attract foundational funding.[20] The sample of

[19] For an economic analysis of "superstar" museums see Frey and Meier (2006), "Superstar museums are able to exploit economies of scale by reaching out to a large number of people" (p. 1037).

[20] The ability for museums to attract funding as a performance measure is consistent with Paulus (2003) who states that foundational funding is a measure of equity because the donor does not receive a direct benefit (unlike revenues from admissions and memberships, for example). Revenues representing direct benefit, on the other hand, are a measure of appealing to the market, showing again the competing and oftentimes conflicting opinions on how to measure performance.

museums for analysis has been chosen from two sources, "Exhibition Attendance Figures 2007" in *The Art Newspaper* (2008) and the Foundation Center's 2008 report, "Top 50 Recipients of Foundation Grants for Museums, circa 2006". "Top" attendance is for both total attendances per year per museum as well as for the largest attendance for specific exhibits compared across, and as reported by, the museums themselves.[21]

We are focused specifically on modern and contemporary "art museums", excluding other types of museums such as museums of history, science museums, children's museums and collections of antiquity or libraries. Of course many museums feature not just modern or contemporary art in their collections or for specific exhibits but it is a requirement that modern and/or contemporary art be included in a museum's focus to be a part of the sample. This follows from whom some say is the first cultural economist, John Ruskin, "First, he saw art (represented primarily in his mind as paintings) as long-lasting stores of value that need to be preserved and accumulated, whether by individuals or by society at large" (Throsby 2011, p. 275). We are using modern and contemporary art, as opposed to pre-modern art, in that pre-modern art might be seen as historical in nature, and therefore less a measure of "novelty" for the average consumer.

We are interested in those museums which are more "market-oriented", and therefore more likely to be influenced by, and able to adapt to, changing public demand in the local communities in which they serve. Therefore we have excluded museums which are government-owned, be that at the local, state or national level.[22]

For our sample museums we begin with all museums which are on both the top attendance and top foundation grant lists (see Table 1). There were 12 museums found on both lists.[23] In order to ensure that there are enough museums

[21] It is debatable whether top per show attendance might represent exogenously a measure of preference-formulation, education, itself. Afterall a 'blockbuster' show reduces the risk and increases the demand for an otherwise marginal consumption of art. For an economic analysis of "special exhibits" see Frey and Meier (2006).

[22] This means that three of the most popular museums in the United States by total attendance, all in Washington, DC and 'owned' by the US Government, are excluded from this analysis; the National Gallery of Art, the Freer and Sackler Galleries, and the Hirshorn Museum. These are hybrid institutions as have considerable private for-profit activity in auxiliary services.

[23] The only museum which appeared on both the top attendance and foundation grant lists from which we were unable to obtain financial information is the Museum of Fine Arts in Boston.

in the research to make a reasonably accurate conjecture on measurement we then expanded the sample to include museums that were on one list or the other as long as they feature modern or contemporary art in their exhibitions. Therefore, any US museum appearing on either list is included in the sample, with twelve of the twenty-seven appearing on both lists.[24] This methodology of course is skewed towards the larger museums in the USA so therefore may not be an accurate measure of the current-generation spending priorities of all museums in the US, and it may be that the smaller museums are more community-oriented than the "top" museums and thus hypothetically may be more education-oriented, however this analysis will have to wait until another day.

The "investment rate" for current-generation equity creation through education

We use annual education expenditures as a percentage of total annual revenues for our analysis, accumulating this data from each museum's audited financial statement for Fiscal Year 2007. This is in accordance with Paulus (2003, p. 53) who uses the concept of a "collectiveness index" for not-for-profit organizations, which is an organization's "ability to attract public and private funding." Paulus uses donations, grants and appropriations as a museum performance measure, with the concept being that these funds, as opposed to admissions and membership revenues, are given without any direct benefit received by the donor, and thus are an indicator of the museums ability to provide public goods[25]. "Essentially, it [the measure of public good "performance"] is the gifts and subsidies portion of total revenues."

[24] The exception here is the O'Keefe Museum in Santa Fe, NM, appearing on the foundation grant list, from whom we were not able to obtain the necessary financial information.

[25] Note that this paper does not evaluate the "public goods" nature of museums, where it is seen that the mere existence of a museum in a community brings value to the community, even to those who do not visit the museum. See Throsby (2003b) who lists under a section of his book called Cultural Capital several non-exchange values, including "option value" (just knowing that art is there brings utility).

Ideally of course spending priorities based on organizational assets would be the most reflective measure of equity transfer but given the fact that museums are not required to report the value of their collection holdings this measure is not possible (see the Appendix for a further discussion on the survey data). Our revenue base includes all revenue, from all sources, and is not confined to Paulus' "collective index" revenues as we are in fact interested in market flexibility as well as public purpose (education) provision.

The fact that we are using expenditures for education as a percentage of revenues implies that our measure of current-generation equity is a type of investment percentage of revenues, or perhaps, an "investment rate" or a "welfare transfer rate", in equity (preference-formation), as opposed to a discount rate-like measure, which would be based on educational expenditure current period as percentage of total assets held for the period. This latter, discount, measure is not possible however given GAAP for museum financial reporting.

Table 1 Museums appearing on top attendance and foundation grant lists, 2007

		Revenues ($ '000s)	Gov % of Rev.	Educ % of Rev.	Source
1	**Met, New York**	290,648	9.37%	4.82%	Both attendance and grant lists
2	**Getty Museum, LA**	258,346	0.00%	3.58%	Top attendance list only
3	**MFA, Houston, TX**	228,379	0.43%	4.22%	Both attendance and grant lists
4	**Art Institute Chicago**	215,817	3.15%	-5.30%	Both attendance and grant lists
5	**MoMA, New York**	147,651	0.17%	0.00%	Both attendance and grant lists
6	**Carnegie Museum, Pittsburg**	76,248	11.67%	0.81%	Both attendance and grant lists
7	**Cleveland Museum of Art**	72,216	0.00%	6.19%	Both attendance and grant lists
8	**Guggenheim (NY, LA, Venice, LV)**	67,266	0.00%	4.02%	Top attendance list only
9	**LA County Museum of Arts**	66,956	28.65%	5.41%	Both attendance and grant lists
10	**Philadelphia MA**	53,031	4.24%	8.88%	Both attendance and grant lists
11	**Detroit Inst. Of Arts**	52,681	12.19%	0.00%	Both attendance and grant lists
12	**Fine Arts Museums, SF**	50,262	19.53%	0.00%	Top attendance list only
13	**Indianapolis Museum of Art**	44,306	0.72%	23.00%	Foundation grant list only
14	**Asian Art Museum, SF**	39,834	16.89%	3.29%	Top attendance list only
15	**SF Museum of Modern Art**	38,062	0.00%	0.00%	Both attendance and grant lists
16	**Denver Art Museum**	30,917	7.15%	4.74%	Foundation grant list only
17	**High, Atlanta**	30,903	0.00%	2.28%	Top attendance list only
18	**Brooklyn Museum**	30,387	30.18%	0.00%	Top attendance list only
19	**Walker Art Center, MN**	19,539	0.00%	8.06%	Top attendance list only
20	**MCA Chicago**	18,894	4.96%	0.00%	Both attendance and grant lists
21	**Seattle Art Museum**	18,651	0.00%	5.47%	Foundation grant list only
22	**Joslyn, Omaha, NE**	17,329	0.00%	4.70%	Top attendance list only
23	**Frist Center, TN**	13,413	0.00%	14.52%	Foundation grant list only
24	**Phillips Collection DC**	13,406	0.00%	0.00%	Both attendance and grant lists
25	**Amon Carter, Ft. Worth**	11,010	2.89%	7.27%	Foundation grant list only
26	**St. Louis AM**	4,495	0.00%	56.15%	Top attendance list only
27	**Barnes Foundation, PA**	4,439	0.00%	0.00%	Foundation grant list only

From Table 1 we find that nineteen of the top twenty-seven museums (around 70%) report education expenditures (shown as a percentage of revenues). We find that two museums (the Los Angeles County Museum of Art and the Brooklyn Museum) receive more than 20% of their revenues from government sources, although incorporated as not-for-profit rather than government entities**.** Of the two only the LACMA reports a separate education expense category, nonetheless it should be excluded from our analysis as appears to be an outlier in terms of government support relative to the other museums in our sample. In

addition we find that the Art Institute of Chicago's art education program is a net revenue generator, so therefore for purposes of this paper the Institute should be excluded from our measure of current-generation equity creation. [26] We have now have seventeen museums from which to make our analysis.

In Table 2 we find the results of our survey given the seventeen museums as described above. The museums report almost $1.3 billion in annual revenues for 2007 and almost $68 million in expenditures for educational activities. This gives an "investment rate" of 5.31%.[27] In other words on average more than 5% of 2007 annual revenues for the top museums reporting expenses for education went toward preference-creation.

Table 2 Education expenditures as a percentage of revenues, 2007

		Revenues ($ '000s)	Education Exp. ($ 000s)	Educ % of Rev.
1	**Met, New York**	290,648	13,998	4.82%
2	**Getty Museum, LA**	258,346	9,246	3.58%
3	**MFA, Houston, TX**	228,379	9,635	4.22%
4	**Carnegie Museum, Pittsburg**	76,248	617	0.81%
5	**Cleveland Museum of Art**	72,216	4,472	6.19%
6	**Guggenheim (NY, LA, Venice, LV)**	67,266	2,705	4.02%
7	**Philadelphia MA**	53,031	4,709	8.88%
8	**Indianapolis Museum of Art**	44,306	10,190	23.00%
9	**Asian Art Museum, SF**	39,834	1,312	3.29%
10	**Denver Art Museum**	30,917	1,466	4.74%
11	**High, Atlanta**	30,903	705	2.28%
12	**Walker Art Center, MN**	19,539	1,574	8.06%
13	**Seattle Art Museum**	18,651	1,021	5.47%
14	**Joslyn, Omaha, NE**	17,329	814	4.70%
15	**Frist Center, TN**	13,413	1,947	14.52%
16	**Amon Carter, Ft. Worth**	11,010	800	7.27%
17	**St. Louis AM**	4,495	2,524	56.15%
	Totals	1,276,531	67,735	
	Education Investment Rate (total education expenses / total revenue)			**5.31%**

[26] This is even more true for 2010 where the Art Institute of Chicago's art education programs realize a profit of $77 million dollars, or, around 33% of that year's revenues.

[27] $67,735 / $1,276,531 = 5.31%

It could be proposed that a perhaps more accurate pay-out percentage would be one based on total current-year programmatic expenditures (education expenditures as a percentage of combined yearly expenditures for both education and exhibition), however, the only proxy for current year programmatic spending reported by most museums is curatorial expenditures. Curators spend their time and budgets on both future- and current-generation activities (and as we learned from the theoretical discussion above, tend to prioritize future generation activities for public choice reasons) so our current methodology is more appropriate.[28]

A note on the Great Recession

It might be argued that the 2007 result of a greater than 5% cultural "investment rate" represents pre-financial crisis economic behavior, whereas a post-crash Great Recession investment rate in education may be lower due to a more difficult economic climate.[29] To test this hypothesis, in Table 3 below we have compared 2007 and 2010 revenue and education spending for the sample museums used in Table 2.

Unfortunately it is not possible to make a direct comparison between 2007 and 2010 for the following reasons:

1) The Getty Museum is no longer reporting education expenses on its financial statement, and, the Getty was around 20% of the sample revenues for 2007,
2) The Asian Art Museum in San Francisco can no longer be considered a private not-for-profit institution in that it received a city-supported bond restructuring to prevent bankruptcy[30], and
3) The Amon Carter Museum is no longer reporting education expenses in the data they make available to the public.

[28] Some museums do report a separate line item for 'exhibitions' however these museums are in the minority. Most, but not all, museums report a curatorial expense line-item.

[29] It should be noted though that 2007 does not represent a period of "easy money" as the Fed began monetary tightening in the spring of 2004.

[30] See Taylor 2011 for information on the Asian Art Museum "bail-out".

Table 3 shows adjusted figures for 2007, removing the Getty, the Asian, and the Carter, and compares these figures with 2010 for the same museums. We find that although aggregate revenues for the museums decreased from around $967 million to around $800 million (a 17% decrease) the investment rate in education increased from 5.83% in 2007 to 6.26% in 2010. On the one hand, it appears that in times of economic difficulty museums still prioritize education, but on the other hand the Getty Museum, the second largest in the US in terms of attendance after the Met, is no longer reporting a separate line-item for education. An additional point of note is we find that in their most recent financial survey of museums made in 2008 (AAM 2009), the American Association of Museums has added a new financial measure of performance, "Education expenses as a percent of total operating expense", a measure not surveyed in 2005 (AAM 2006).

Table 3 Education expenditures as a percentage of revenues, 2007 and 2010

		2007 (adjusted)			2010		
		Revenues ($ '000s)	Education Exp. ($ 000s)	Educ % of Rev.	Revenues ($ '000s)	Education Exp. ($ 000s)	Educ % of Rev.
1	**Met, New York**	290,648	13,998	4.82%	294,109	13,422	4.56%
2	**Getty Museum, LA**				n/a		
3	**MFA, Houston, TX**	228,379	9,635	4.22%	104,842	8,177	7.80%
4	**Carnegie Museum, Pittsburg**	76,248	617	0.81%	49,247	441	0.90%
5	**Cleveland Museum of Art**	72,216	4,472	6.19%	55,301	4,214	7.62%
6	**Guggenheim (NY, LA, Venice, LV)**	67,266	2,705	4.02%	82,622	4,165	5.04%
7	**Philadelphia MA**	53,031	4,709	8.88%	51,521	5,310	10.31%
8	**Indianapolis Museum of Art**	44,306	10,190	23.00%	27,388	5,303	19.36%
9	**Asian Art Museum, SF**				n/a		
10	**Denver Art Museum**	30,917	1,466	4.74%	23,715	1,170	4.93%
11	**High, Atlanta**	30,903	705	2.28%	38,840	550	1.42%
12	**Walker Art Center, MN**	19,539	1,574	8.06%	18,634	1,727	9.27%
13	**Seattle Art Museum**	18,651	1,021	5.47%	25,860	1,226	4.74%
14	**Joslyn, Omaha, NE**	17,329	814	4.70%	7,758	519	6.69%
15	**Frist Center, TN**	13,413	1,947	14.52%	13,423	2,138	15.93%
16	**Amon Carter, Ft. Worth**				n/a		
17	**St. Louis AM**	4,495	2,524	56.15%	5,302	1,658	31.27%
	Totals	967,341	56,377		798,562	50,020	
	Education Investment Rate (total education expenses / total revenue)			**5.83%**			**6.26%**

Summary of Findings

In this paper we have tried to make the case that trading-off some consumption of normal goods for the consumption of art as "one of the finer things" in life can bring a greater utility of consumption to an individual over his or her life-time. Following Hume we have assumed that people have an innate taste for art in our psychological make-up, however, the exercising of these tastes in the economic sphere requires the creation of preferences. We examined the role for the art museum in preference-creation in light of the "public purpose" charter for not-for-profit organizations in the United States and believe that art education can fulfill this purpose by reducing the risk of consuming the novel. Educational spending, as opposed to exhibition spending, we have proposed, increases current-generation equity in that it allows more people in the current generation to experience art, however, reviewing the literature on the economics of museums we found that there are institutional and public choice reasons for museum to prioritize intergenerational equity (spending for future generations) as opposed to spending for the current generation.

We also find varying opinions as to what exactly should be the goals of a museum. Paulus (2003, p. 51) believes that the goals of a museum are "preservation, research and communication", yet there is no universal agreement as to how scarce resources should be divided between these competing ends. Therefore performance measurement for museums is difficult if not impossible. We take this problem into account and use the audited financial statements of the "top" 27 museums in the United States, those in 2007 with the largest attendance and the largest grants from foundations, to determine how museums in the US prioritize spending on education, with education being a proxy measure for the prioritization of current-generation equity. This approach is unique to the literature.

We found that approximately 70% of the "top" not-for-profit museums in the USA report expenditures for educational programs in their audited financial statements in 2007. This is perhaps underwhelming given that that their tax-exempt charters are based mostly on a public purpose of providing education services**.** We have also found that those museums who do report education expenditures spend on average more than 5% of their revenues on education. Given the aforementioned institutional, public choice and otherwise, incentives for spending on collections and research versus for current programs let alone preference-creation, this again is not an insignificant "investment rate". We also

found that in aggregate, although revenues of those museums reporting educational expenses decreased by 17% from 2007 to 2010 due to the Great Recession, average expenditures for education as a percentage of revenues actually increased with economic downturn.

Further Research

Our paper has introduced two avenues for further research into equity measures for not-for-profit museums in the USA. The first would be to evaluate smaller, more local museums to determine their spending priorities in preference-creation, these museums, after all, may be more indicative of art consumption in the day-to-day lives of most Americans. A second avenue might be to evaluate new art acquisitions as reported by museums in their annual reports and compare the expenditures for these acquisitions relative to expenditures on educational and/or other current year expenditures. This might give one positive indicator of museum priorities for intergenerational equity.

Appendix

Notes on data methodology

All data for all museums as reported taken from the FY2007 and FY2010 financial reports of each museum as prepared under generally-accepted accounting principles (GAAP) for not-for-profit organizations in the United States. Revenues and expenditure data are from the Combined Statement of Activities and Changes in Net Assets, sometimes referred to in the financial statements as Statements of Activities or Statements of Financial Activities.[31] Revenue and expense items are both restricted and unrestricted funds, including permanently restricted funds, however, non-operating cash flows (i.e., investment returns in excess of policy goals, accounting changes, etc.) are excluded. Revenues also include sales of deaccessioned art work, investment income, and foundation transfers where reported as current income. Educational expenditures are net of student fees and student aid, if any. It is well known that there are difficulties in capturing the true asset values of museums due to the non-reporting of the value of collections (both as a capital asset and therefore as a capital expense), as is well argued by Grampp

[31] The exceptions are that the financial statements for the Guggenheim and the St. Louis Art Museum are for 2006.

(1989) and (1996), so therefore Paulus (2003) recommendation that equity measures be based on revenues is a sound one and is followed in this paper.

Government contributions (both grants and direct appropriations) are reported only as listed in financial statement line items. Most museums, as reported in the body of the paper, have a stand-alone line-item for education expenditures, sometimes labeled education and public programs. However the St. Louis Art Museum, the Philadelphia Museum of Art, the Cleveland Museum of Art and the Metropolitan Museum of Art (NY) report combined education and library expenditures. Although it could be rightly argued that library expenditures (net of revenues) would be better classified as intergenerational as opposed to expenditures for the current generation, to do so would lose the education expense portion so the present author decided to report these combined items under 'education'.

Where education and curatorial expenditures are reported under the same line-item, the line-item is not included as an education expenditure. Where separate line-items for schools are present (MFA Houston), it is taken to mean that these are considered as business units separate from the normal business of the museum so are excluded from the calculation of museum expenditures on education.

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