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The museum from an economic perspective

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Scientific museum research has traditionally been approached from the sociologist's point of view, with emphasis being placed on the behaviour of the visiting population and its composition in terms of class, age, sex, educational level, etc. The potential areas of interest, and the problems and decisions that museums face, are not limited to this area, however. One central problem faced by all museums today, private as well as public, is that of financing. This is of course the natural point at which most people can see the economist making his entrance. The economist's contribution to scientific research, however, is not limited to financial problems and their analysis, as is often assumed. It is rather a particular way of approaching problems and analysing them that focuses on the individual and his behaviour in situations in which he is faced with a choice to be made. The basic assumption is that people are able to act and choose, and that in any given situation, the rational individual will, within the scope of the constraints and possibilities present, act in a way that he perceives as bettering his situation. In this article we propose to look at how this makes itself felt with respect to the museum. As economists we would like to see what are the interests in and demands made on the museum, and what services the museum in turn does or does not offer. Typical questions asked by the economist are: What are the population's wishes? Are these wishes fulfilled, or does the museum have other goals that take higher priority? How can the museum survive financially if it follows goals other than the wishes of the tax-paying population? Our desire is not to deprecate or displace other angles of approach that have been previously applied, but rather to complement them in the hope that even more fruitful results can be gleaned through the interaction of different viewpoints being applied to the same subject, in this case the museum.

In looking at the visitor's demand for museum services, the economist's

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point of departure is the costs involved. 'Costs' involve much more than the simple entrance fee and other monetary factors; they cover every non-monetary expenditure and effort the person has to make to do something, and everything that he has to give up or do without in order to have or do this (instead of something else). In the context of demand, the 'cost' is considered to be the 'price' of something. Traditional economic demand theory can be used to examine the relationship between demand and cost (price) for any good. According to this theory, if the price of a good falls, and all other circumstances remain the same, the demand for the good will rise until the additional benefit (utility) that the person gains by consuming the last unit of the good is no longer worth the additional costs that its consumption entails. The emphasis here is quite different from that in a sociological analysis: instead of looking at social categories (class, age, family status, etc.)[1], which can only be changed with great difficulty, if at all, and which thus furnish us with little in the way of a direct basis for forming and modifying museum policy, the economist focuses on instruments, i.e. those things which can themselves be directly changed in order to achieve a particular effect. For example, if the entrance fee is increased, a policy decision which may well be discussed in an attempt to cover deficits, this may have a considerable effect on the visitors. Thus the economic approach can have great significance in making decisions concerning the carrying out of a particular museum policy, i.e. what instruments to use.

In discussing the demand for a museum's services we are thinking not just of the visitors to the museum coming from the general population, but also—if not foremost—of other groups who may have a special interest in particular museum services, such as professional art historians.

When we turn to look at the supply side we can again proceed analogously to the analysis of a good produced by a private manufacturer. Here the museum directorate is placed in the position of the supplier, and its behaviour analysed with the aid of the economic approach. As is the case with private enterprises in the market-place, the interaction with those who control the financing is also significant for a museum. For private museums these are primarily donors and trustees; for a publicly-supported museum, primarily politicians and bureaucrats.

What we are applying here is a branch of economics that has developed particularly in the last few years. First, we take theories concerning profit-oriented enterprises that sell their products to private consumers on a market and extend them outside the market-place to enterprises that are not profit-oriented. Second, and most important, the central point of our analysis is human behaviour, and the incentives that determine it. In the area of culture, most of this work has been done with respect to the theatre and orchestras (Baumol and Bowen, 1966; Netzer, 1978; see also various articles in the *Journal of Cultural Economics* started in 1977), though there have also been some contributions concerning the museum (Montias, 1973; O'Hare, 1974; Peacock and Godfrey, 1974; Hendon, 1979). This approach has also gained great significance in its application to areas of political

behaviour, such as in analyses of the behaviour of politicians and government bureaucrats (Frey, 1978; Mueller, 1979).

The present study has been limited to art museums, but most of the analysis and conclusions hold for other types of museums as well. We will first discuss the demand for museum services including the specific interests of art lovers, art historians, politicians, and future generations. The influence of the relative implicit and explicit costs involved on the rate of visit of the general population is also discussed. The next section then goes on to look at the behaviour of the suppliers, in particular that of the museum directorate. The last part of the article will suggest some possibilities for influencing the demand and supply of museum services.

The demand for museum services

The general public

The demand of the population at large for museum services is assumed here to be expressed through its rate of visit—and only those visits undertaken of one's own free will. Visits such as those of schoolchildren when they are more or less compelled to visit the museum are not included, as they do not represent the children's own demand. As set out in the introduction, we have taken as our base the economic model of behaviour which assumes that individuals will act to maximize their own utility (i.e. try to improve their situation, or to benefit themselves) subject to the constraints of the situation. The utility derived from a visit to a museum consists of the pure consumption effect (the enjoyment of looking at the exhibits) and/or an investment effect: the visit may serve professional purposes, or it may be used to increase the person's prestige in social exchanges, for example at cocktail parties. The constraints are, as always, the individual's income and time budgets, and the monetary and non-monetary relative price (i.e. cost). This balance of utilities against constraints (the 'demand function') is what determines the rate of visit, and allows us theoretically to determine why some people visit museums and others do not. This is graphically represented in Figure 1. People for whom the visiting price is below p_{max} will find visiting the museum to be a profitable experience, while those for whom it is above p_{max} will not visit the museum as their net benefit will be negative.

As indicated above, 'price' here does not refer to one single, monetary price, but rather is made up of different monetary and non-monetary cost components. We have distinguished between six cost components of the price of a museum visit:

1. Entrance fee.
2. Transportation costs (but only the additional outlays needed specifically for the visit).

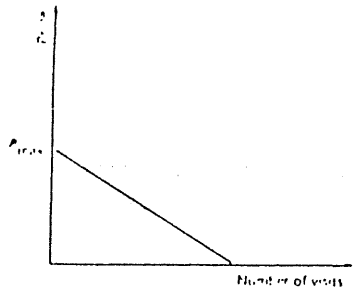

FIG. 1. Demand for museum visits.

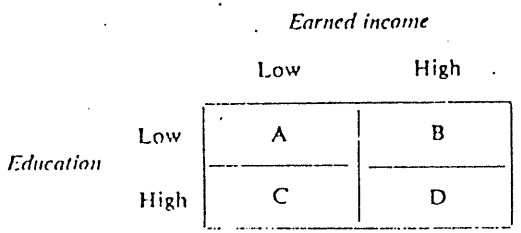

FIG. 2. Relationship of museum visits to income and education

Cost components 1 and 2 make up the explicit monetary cost of a museum visit.

3. Time cost involved in travelling to and from the museum, as well as the time actually spent in the museum. This cost must be measured in terms of opportunity cost (see below).
4. Information cost on how to get to the museum and what the content and interest of the particular exhibits are. It is expected that the higher the individual's level of education, the lower this information cost will be.
5. Comprehension cost relating to understanding the exhibits. Again, this is mainly determined by the educational level.
6. Communication cost connected with relating the experience further. As with costs 4 and 5, this is also expected to be inversely related to the educational level.

We have said that the time cost involved (No. 3 above) is measured in terms of opportunity cost, i.e. what are the alternative opportunities for enrichment (in the form of monetary, prestige, or other forms of 'income') relinquished by engaging in this activity. The greater the opportunities for earning such 'income' by devoting more time to other activities, the higher is the opportunity cost of the time spent in the museum. Monetary income reflects the opportunity costs of time and is therefore taken as the measure of time costs. It is assumed that the higher a person's earned income, the more expensive (in absolute terms) is the time devoted to leisure activities, i.e. the higher the opportunity cost.

We can now derive testable propositions on the individual's demand for museum services. All other things remaining equal, it may be hypothesized that the higher the person's income level, the higher the opportunity cost of time and thus the higher the visiting price, resulting in a low rate of visit. On the other hand, if the level of education is high then the information, comprehension, and communication costs will be low, which will result in a lower implicit visiting price and thus a higher visiting rate. There is usually a strong positive correlation between high income and high education. We can thus expect to see opposing influences at work at the same time: high income reducing, and high education increasing the rate of visit. This hypothesis is different from that of sociologists, who usually only consider the effect of the educational level on visists, and thus advance that people belonging to higher classes (i.e. with higher education and higher income) will tend to visit museums more often.

Income and education need not be positively related for everybody. Figure 2 shows four possible combinations of high and low income and education.

In cells A (low income and low education) and D (high income and high education) there are countervailing influences at work which affect the rate of visit so that we cannot make a hypothesis as to what the end result will be. Cell B characterizes people with high earned income and low education: the implicit visiting price is high and thus a low rate of visit is expected. In cell C are those with low earned income and high education: their implicit visiting price is low, and thus we would expect them to show a high rate of visit. Examples of those falling into cell B might be self-made people, entrepreneurs, or successful professional athletes; among those in cell C may be elementary-school teachers, low-paid intellectuals, or *rentiers* without additional earned income.

In economic analyses of privately supplied goods, by far the most important—if not the only—cost component is the explicit monetary price to be paid for the good. In the case of museum visists, however, entrance fees as they are currently set seem to be of minor importance in determining the rate of visit. The most important cost elements seem rather to be those connected with information, communication, and especially comprehension. Though it does make a difference whether a fee is charged at all, empirical studies using econometric methods suggest that the rate of visit does not depend closely on the level of the entrance fee (i.e., low elasticity of demand). The same applies to other forms of cultural activity.[3] For instance, a study for the Boston Museum of Fine Arts found that when the entrance fees, which averaged one dollar, were increased by another dollar to an average of two dollars—a 100 per cent increase—there was only a 10 per cent reduction in monthly attendance (O'Hare, 1975). Thus a relatively large increase had only a small influence on attendance. On the other hand, it was observed in the same museum that the rate of visit increased significantly when free entrance was introduced (O'Hare, 1974); and that when the free-entrance period was changed from Tuesday evening to Sunday morning, attendance shifted correspondingly.

Another indication of the relative unimportance of entrance fees is the fact that people with lower education levels will state significantly more often than more highly educated people that the price has no influence on museum visits, and that a much higher entrance fee should be asked. These are exactly the same people who rarely visit museums. Their disinclination to go to museums is thus obviously more due to factors such as comprehension and information rather than to the entrance fee. If these were less significant, then the entrance fee would become relatively more important, and they would not be in favour of a higher price.

Special care has to be taken to measure the demand for museum services adequately. The number of visitors, the number of visits (per person per time period) and their duration should be distinguished. This last aspect can be dealt with by looking at 'visitor hours', according to which one hour spent by one visitor in the museum would be equivalent to two visitors spending half an hour each, etc.

Neither visits nor visitor hours, of course, directly reflect the utility gained from the museum's services. One way to approach this aspect could be to look at the market prices paid to acquire the museum's exhibits. There is some indication that people spend more time at an exhibit—and thus have a greater benefit of some kind from it—when they know that its market price is high. In this case quality is being judged by the price. The opposite may, of course, also be true, namely that the price of a painting may be high because it is popular with the visitors. Economic theory can offer an array of methods for assessing the direction of causality. It is possible to discover individual preferences through interviews, laboratory experiments, examination and interpretation of popular referenda, monetary and non-monetary expenses incurred in order to visit the museum, etc. (Pommerehne and Frey, 1980).

One instance in which a popular referendum was used to assess popular preferences in art was in 1967 in the Swiss canton of Basle-City. Due to a shortage of cash the owner of two later-period Picasso paintings, which had been on loan to the City of Basle's Museum of Art, decided to sell them. In order to save these paintings for the city, it was decided that, if approved by popular vote, half of the sales price should be covered by the canton while the other half would come from private contributions, in particular from firms. After considerable discussion and manœuvering[3], the taxpayers decided by 54.2 per cent to approve the necessary sum. An analysis of this referendum (Frey and Kolin, 1970) suggests that those with higher incomes took a stand more favourable to the fine arts, a result that accords with numerous museum-visitor surveys.[4] This seems to have been the first popular referendum on modern art. The outcome pleased Picasso so much that he subsequently gave several of his paintings to the people of Basle as a present.

Art lovers and art historians

Art lovers are here defined as members of museum clubs, donors and museum trustees (an honorary position). They are an important group even in their function as visitors. In 1977/78, for instance, one out of every three visits to the Museum of Modern Art in New York was being made by a member. Thus art lovers are not only significant in terms of their numbers, they also have a particularly high visiting rate.

The model of utility maximization subject to constraints can again be applied here in order to explain the behaviour of this group of visitors. The art lovers' utility, derived through being attached to the museum and visiting it, consists of satisfaction of their intrinsic interest and enjoyment of art, the prestige gained from their generosity and close contacts with the museum's directorates and curators, and, in the case of donors, the 'immortality' gained by giving works of art to the museum and having them displayed there (with the appropriate name tags). Tax deductibility can of course be another important motive for donations; the law is more generous in this respect in the United States than on the European continent.[5]

Art lovers are also subject to lower costs than normal visitors: they are supplied with free information on the museum's activities and do not pay an admission fee for every visit but an annual sum, so that frequent visits may be cheaper in the long run. These two factors constitute an incentive for joining the museum club. Membership may also carry with it special privileges such as entrance to a members' lounge, a members' restaurant, and invitations to social gatherings connected with the opening of new exhibitions.

The nature of the benefits accruing to members suggests that they have a high demand for social activities within the context of the museum, and thus that they will have an interest in keeping the membership exclusive—once they are themselves members. They are thus less interested in popular exhibitions that may attract large crowds, and rather prefer more esoteric and thus exclusive exhibits.

The utility to art historians consists of the professional career and income possibilities they derive from the museum. They are not interested in generally popular exhibits but in those that have 'historic value', which may lead to demands very different from those of general visitors. They are interested in specialized exhibitions and specialized stocks not shown to the general public because—as in all sciences—their research is conducted in narrow areas which are dealt with in depth.

Politicians

In the role of politicians this group does not have a direct interest in the museum's exhibits. The main utility derived from the museum's existence comes from the prestige associated with it or with particular exhibits.

The politicians' behaviour is constrained by their need to be re-elected. They thus have to follow a cultural and museum policy that will be viewed favourably by their constituents. They will also have to consider the wishes of the local business community, which may be interested in museum policy as *it* may derive indirect income from the museum's existence and exhibits. On the whole, however, we can expect cultural and museum policies—as long as serious scandals are avoided—to have only a weak effect on re-election chances.

Another constraint faced by politicians is that of the budget. Here they have to compare and weigh outlays made for museums with those for other purposes. Even where the arts enjoy strong public support, as is the case in most European countries, the share of expenditure devoted to culture and museums is quite small compared with total public expenditure.

Based on all this, it may be hypothesized that politicians will have little incentive to intervene directly in the museum's business because of the high information cost such intervention would necessitate, and the low level of benefits to be derived from doing so. They will however want to make sure that no major scandals occur, and this will favour a more conservative museum policy. As a high degree of specialized competence is needed to intervene constructively on the output side of museum activity, they will usually impose at best an input control, through the number of personnel, space, and funds made available.

Posterity

Posterity is considered to have an interest in the museums of today because they are one of the most important institutions serving to collect and preserve the past. At least four groups behave so as to protect indirectly the interests of future generations in the process of serving their own:

Conservative and traditionally-minded people, who derive utility from preserving the past. As Wolf (1970) suggests, these are mainly older people, who generally want to preserve the past because when a change occurs they lose part of their accumulated stock of cultural knowledge and of their identity. This is a loss for them and can serve to alienate them from the world about them: on the one hand, the world becomes more foreign for them, and, on the other hand, they are less able to partake in and contribute to it in a way appreciated by others.

Donors to the museum serve the interests of posterity in the course of their quest for personal immortality.

Historians, scientists, and other researchers have a basic interest in history, and thus in preserving the artefacts of the past.

Those who work for the museum in either a voluntary or employed capacity have an interest in maintaining the museum in order to retain this source of satisfaction, prestige, and/or income.

The supply of museum services

The main actors determining the supply of museum services are the directorate and its professional staff (curators, etc.). For the sake of simplicity we are restricting our discussion to the directorate.

Behaviour of the museum directorate

The directorate derives utility from the museum in two ways: (a) Through prestige and status gained in the eyes of its reference group, which consists mainly of art lovers, art historians, the international museum community and, in particular, other museum directors. This is enhanced by meeting the high standards of 'performance excellence' set by the professional group (for a discussion see Lee (1971), regarding hospital doctors); (b) Through the provision of agreeable working conditions, and of job security—a significant matter in view of the potential problems arising from this type of education and degree of specialization.

In line with the economic model, we must also look at the constraints on the directorate's behaviour:

Financial (budget) constraint

This sets the limit on the money available to the directorate for expenditures. The main sources of income for current expenditures are public subsidies; private support in the form of fees from the museum membership on a continuous basis and irregular amounts received from individuals; income from commercial activities such as sale of publications, reproductions, cafeteria income, etc.; and of course entrance fees. The main capital income sources (i.e. funds earmarked for the purchase of works of art) are public grants to buy art objects; private donations either directly in money, or in works of art that can be sold; and income arising from the sale of objects out of the museum's stocks. Table 1 gives as an example a breakdown of the New York Museum of Modern Art's income sources for 1973/74 to 1977/78. Most of the funds are income on current account (90 per cent); the capital (purchase) account income is relatively unimportant.

The Museum of Modern Art is a privately supported museum and as such receives most of its income from private, commercial, and museum-generated (entrance and membership fees) sources. Most European museums, on the other hand, are basically publicly subsidized and thus much less dependent on such income. As an example, while only 11 per cent of the Museum of Modern Art's income comes from government funds, this is the source for approximately 70 per cent of the money available to the Kunsthaus in Zurich, Switzerland.

One of the most striking things about the breakdown is the marginality of entrance fees as a source of income (10 per cent). This is in general true for all museums, and perhaps even more so for European museums. The directorates

TABLE 1. Income sources of the Metropolitan Museum of Modern Art, average of 1973/74 to 1977/78 (years ending 30 June)

	$ (thousands)		Total income (%)	
Current account				
Government support	1,119.1		11.0	
Private support	814.8	2,598.2	8.1	25.7
Annual fund contributions	987.4		9.7	
Return from endowment funds	796.0		7.9	
Membership dues	1,029.3		10.2	
Publications and auxiliary activities	2,987.8		29.5	
Admissions	1,134.2		11.2	
Miscellaneous other income (including junior-fund income)	404.6		4.0	
SUBTOTAL	9,273.2		91.6	
Capital (purchase) account				
Public support	—	333.7	0.0	3.3
Private support	277.8		2.7	
Transfers from endowment funds	55.9		0.6	
Sales of works of art	505.3		5.0	
Other income	6.7		0.1	
SUBTOTAL	845.7		8.4	
TOTAL	10,118.9		100.0	

Source: Biennial reports of the Metropolitan Museum of Modern Art, 1974–76 and 1976–78.

of these museums may fear that an increase in entrance income will lead to a decrease in the amount of publicly funded support that they receive, which would in turn force them to install exhibits to attract a wider public. They may not wish to do this, as we shall see. In privately supported museums, on the other hand, which are common in the United States, significant entrance income is taken as an indication of success in the museum business, and can lead to increased public funding.

Space constraints

Most museums are short of space, a constraint that seems to weigh heavily on the minds of museum directors, as it is often mentioned in reports. Extending a museum seems to be possible only at high cost, if at all.

Legal and administrative constraints

This is especially true for public or semi-public museums as are mostly found on the European continent. Museums here usually have a special legal status as public-benefit institutions even when they are private. This status brings with it not just public financing; it also causes the museum to be bound by the legal and administrative principles governing the public sector, and especially with respect to conditions of employment. This can serve to tie the directorate's hands in ways it finds undesirable: hours and wages are prescribed, and there is little room for incentive payments.

There may also be other specific regulations to be taken into account. In the United Kingdom, for instance, museums were for a time not allowed to use the money earned through entrance fees to purchase works of art. (This is not a usual regulation.) And while the directorate may have a certain amount of freedom in setting different prices for different visitor groups (schoolchildren, *rentiers*, etc.) and the opening hours, it is usually not allowed to offer free entrance throughout and charge no entrance fees whatsoever, as the trustees and/or the politicians would object.

Restrictions imposed by the trustees, and by the donors

While trusteeship is an honorary position, trustees seem to have considerable influence on museum policy, especially in the privately and commercially run museums in the United States. As for donors, these may attach strings to their gifts, particularly concerning the way in which they are to be exhibited, that can greatly restrict the directorate in its freedom to arrange the exhibits as it would like.

How the directorate tries to achieve its goals

How the museum directorate sets about to achieve its goals will depend heavily on the institutional set-up, and particularly on the nature of its funding. The directorate of a privately supported, more commercially oriented museum will behave differently than that of a semi-public museum that depends mostly on money coming from the public purse. We will concentrate in the following mainly on the latter kind.

Publicly supported museums receive sufficient funds to cover the expenses allotted to them in the budget; they thus have in practice a deficit guarantee, at least up to a certain amount. As most of their expenses result from the operation of bureaucratic norms (relating to wages, etc.), and their deficit is covered, the directorate has little incentive to save or hold down costs. The guarantee rather gives them the freedom to pursue their own policies.

The museum directorate can only achieve its goals of prestige, performance excellence, and agreeable working conditions if it has sufficient leeway to act as it sees fit. One way that the directorate may try to achieve this leeway is by moving more and more from a commercial to a non-commercial framework, in order to relieve itself of the extra pressures that the need to show 'commercial' (or popular) success can bring. On the European continent, and particularly in the

Federal Republic of Germany, the directorates seem to have been more successful at substituting other than monetary standards for their work than has been the case in the United States (Treinen, 1973).

When the directorate is no longer forced to work within a 'profit-making' framework, it can legitimize its activities by referring to their intrinsic 'artistic', 'scientific', or 'historic' values. This application of specialized, non-commercial standards helps to minimize external attacks as it becomes very difficult for ordinary visitors and politicians to criticize competently the directorate's policies and propose different ones. The influence of both of these groups with regard to museum activities is usually limited to monetary matters, and it is thus much easier to ward off their attacks (and thus avoid external control) when the activities and values connected with the museum are non-commercial in nature.

In line with this policy, the valuation of the museum's activities and exhibits is usually done by experts within the museum world—i.e. the supplier (the museum) defines its own standards of service.[4] There is not usually much exchange between museums and other institutions such as the university, which would also be in a position to supply expert reference groups, possibly because these would then also have their own ideas as to what should and should not be done.

This policy of non-commercialization on the part of public and semi-public museums, whose goal is to increase the directorate's discretionary leeway, is of course expressed in the directorate's behaviour. Some of the ways in which this emerges are:

Commercial activities are minimized as far as possible. We can expect to find fewer restaurants managed by the museum and fewer shops, and those that exist will probably be on a small scale, with little interest in making a profit.

It is common bookkeeping practice in all museums not to value commercially the objects in the museum's stocks and not to include them among the assets, although their market value may be extremely high. One reason for this is of course the difficulty of estimating the market price in a field where the number of transactions is small. It is therefore not at all clear what the commercial value of most exhibits is. Besides, the market value of most art objects would drastically fall if they were actually put up for sale: as more of them entered the market and the market became saturated, they would lose their scarcity value. These valuation difficulties are however not limited to museums and could be overcome. More important is the fact that most directorates have no interest in the commercial value, and may even prefer not to evaluate their assets commercially, for the reasons given above. Using criteria of a solely 'artistic' or 'art-history' nature to evaluate the objects, and rejecting commercial valuation even for bookkeeping purposes, can help to minimize intervention.

The decision whether to sell objects out of the museum's stock will be subject to contradicting influences. On the one hand, sales yield income and help to relax the budget constraints, on the other hand, however, the market valuation, which necessarily comes with the sale, goes against the interests of the directorate. Also, increased income from this source may cause private and public funding sources to give less, and may lead to the expectation that the museum can cover part of its own expenses on a more or less regular basis through sales of stock. This last point would of course force the directorate into the commercial sphere, and could also force it to make sales it would not otherwise wish to make. In the end the decision as to sell or not to sell will depend on the institutional framework of the museum, and the strictness of budget constraints. Where they are quite strict, as is often the case in the United States, more selling will occur (during the period 1973/74 to 1977/78, an average of 60 per cent of the Museum of Modern Art's purchase fund came from the sale of art objects). Where they are not strict, as for example where the budget deficit is automatically covered, there will be little or no selling. (The Kunsthaus in Zurich has reported no selling of art objects over the last ten years.)

The directorate will try to avoid disclosing the prices it pays for new objects, for two reasons. First, by not disclosing the price, it can sidestep discussions about possible alternative uses for the money. (This avoidance of possible controversy is also a reason why the conditions attached to donations are usually also not disclosed.) A second reason, and potential point of attack, arises from the different levels of risk involved in buying and selling. When buying, the directorate faces little or no risk with respect to the price paid because the value of the object is evaluated according to 'artistic' or 'historic' criteria, and these can always be adjusted to whatever price is paid. Selling, however, is riskier. The work sold by the museum may later be sold again on the market at a higher price, which can suggest that the museum asked for too little in its transaction.

How the directorate uses its discretionary leeway to maximize utility

Once the directorate has managed to expand its room for independent action and to shield itself from outside influences and criticism, it can proceed to use this gained power to maximize its utility. Here are some specific examples of how this is done, again focusing on semi-public museums:

The museum directorate is of course greatly interested in putting together special exhibits the success of which will be directly attributed to the directorate and its staff. Such exhibits gain them recognition (most importantly, in the museum world), and bring prestige and career potential.

On the other side, the directorate will have little interest in hosting travelling exhibitions. Even if such exhibitions are very successful they will not particularly contribute to the museum's own reputation for performance

excellence among other museum professionals. Such exhibits may serve to please the ordinary visitor, whose preferences are of relatively little importance and whose satisfaction is not a major goal.

The museum directorate tries to achieve performance excellence, i.e. professional recognition, through 'specialization' and 'completeness'. 'Specialization' means having all of the 'artistically' and/or 'historically' important pieces of a particular artist's production in the museum's collection regardless of their individual quality level. This is, of course, warmly supported by art historians and other researchers. Excellence in this area is usually only visible to insiders, i.e. to people with the training and specialized consciousness necessary to appreciate what is being done. It is usually of very limited interest to ordinary local visitors, as the additional utility gained by looking at the often indistinguishable products of the same artist goes down as the number of works goes up. 'Completeness' means having all historic styles represented in the museum. This gives it a certain stature as compared with other museums too small to do this.

The directorate is also interested in producing catalogues that will have an art historic value, as this gives something of the same prestige that a university-based researcher receives by writing a book. These catalogues will be published even if they run a deficit, but this is again influenced by the nature of the institutional framework. Publicly supported museums with deficit guarantees can afford to run greater deficits on such publications. Privately supported museums, however, which are subject to a stricter budget constraint, cannot afford to run such deficits and thus will attempt to make their catalogues more readable and popular. The Museum of Modern Art in New York even manages to make a nice profit out of its 'publications and auxiliary activities' (retail operations including reproductions). From 1973/74 to 1977/78 it made an average profit of over $260,000 a year on such activities, about 10 per cent of its revenue, while the Zurich Kunsthaus had a loss of more than 4 per cent of its revenue because of such activity (1973–77).

The attitude of the directorate towards the public

The museum directorate has only limited interest in a large number of visiting public and in the population's preferences in general, because its focus is on the museum world, its main reference group. A high rate of visit thus yields only comparatively small rewards for the directorate and its staff. The leeway to act independently that it has gained will allow it to ignore the public to some extent, and it will tend to behave as follows (particularly in publicly supported museums, since these have more leeway than privately supported ones):

The directorate will not exert itself too much to put together really popular exhibitions that would have a high visiting rate. It has no incentive for doing this, as its utility is maximized by gaining the approval and admiration of other museum professionals, and not that of the general public. High rates of visit thus often seem to be more the result of chance than of intention.

Museum exhibitions are generally poorly presented didactically. The history and nature of the artists' work is rarely well explained, and little is offered to help the average, uninitiated viewer (i.e., the majority of actual and potential viewers) to understand and differentiate what is being presented, and why it has been singled out. Accompanying information sheets are often written in a language incomprehensible to those who are not already familiar with the subject. There is no clear guidance offered to the collections, and little or no effort is made to relate the exhibits to what the average viewer already knows about the history, political conditions, culture, famous people, etc., of the period in which the work of art was produced.

The directorate also has little incentive to make the visit to the museum physically pleasant to the average visitor to whom the comforts of the museum club lounge are not available. The entrance is often unattractive and bewildering, and little is offered in the public areas in the way of comfortable chairs, smokers' corners, eating facilities, etc. If anything is done, it is at a non-professional level, and in no way comparable to the standards applied to the mounting of the exhibitions.

Conclusions

The major contribution of economics to museum research may lie in its analysis of the supply side. In our sketch of a theory of its behaviour, we have found that the museum directorate has only limited interest in satisfying the wishes of the general visiting public, and that its main interest is rather in performing well and being acknowledged within the museum community, which is composed of donors, trustees, art lovers, art historians and, most important, other museum professionals.

If we are to influence the workings and policy direction of museums it is necessary primarily to change the rules within which the museum directorate acts, i.e. we must change the particular incentive structure of the situation in which the directorate's choices are made. The economic mode of analysis allows us to pick out the points at which changes can be introduced to serve to alter the balance of utilities and constraints, which changes the choices that will be made. In other words, it provides us with instruments for effecting changes in policy and other decisions.

One possibility for changing the operational structure of the museum would be to increase the formal participation possibilities available to the general public. Our analysis here has shown that the population now has relatively little influence

on museum policy, especially under the framework generally prevailing in Europe. A carefully handled voucher system, for example (see Peacock, 1969; Blaug, 1977; and the attempts in New York discussed by Bridges, 1977) could be used for this purpose. Under this an entrance fee would be charged by the museum which would cover its costs as calculated according to the last available projection of the expected number of visits. Every member of the community (i.e. the local public) would receive vouchers which would allow them to enter the museum free of charge; the voucher would be handed in at the time of the visit in lieu of money. Persons would then be free to 'spend' the vouchers as they pleased in the various museums located in the community. The museum would receive a monetary subsidy according to the number of vouchers it had taken in. This would make financial support of the museum clearly dependent on popular preferences.

Another way for the public to influence museum policy would be to increase the amount of direct participation in it by the voters working through the political process. Institutional arrangements, such as referendums on particularly expensive acquisitions, and even on the annual budget, would allow the electorate to make their wishes felt concerning the type of museum and exhibits they prefer.

Still another way would be to change the institutional set-up. We have seen that whether the museum is privately or publicly owned and supported has a considerable impact. By examining the relative advantages and disadvantages connected with the two, we may be able to develop an institutional framework that would best combine their merits.

Notes

[1] See, e.g., Graña (1971, p. 95-111) and Bourdieu (1969), who gives a long list of further works. A survey of relevant studies in the United States is given by DiMaggio, Ussem and Brown (1978). For French-speaking countries, see Bourdieu and Darbel (1966); for German-speaking countries, see Klein (1978).

[2] See Baumol and Bowen (1966, p. 289), Moore (1966), and Netzer (1978, p. 30-1).

[3] There was vote-trading in that the supporters of modern art offered to support a referendum on a sports arena in exchange for the sport fans' support for the Picasso paintings. This kind of strategic voting makes it difficult to interpret the outcome in terms of individual preferences.

[4] See note 1.

[5] See Netzer (1978, p. 50 ff.) and Vandell and O'Hare (1979).

[6] The director is supported in this policy of non-commercial valuation standards by art historians, for whose research art museums and their services are of considerable importance. They are especially in need of efficient cataloguing services.

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