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CULTURAL ECONOMICS AND MUSEUM BEHAVIOUR

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I The Problem

The economics of art or culture has over the last few years become a well established field. The 'classical' contributions are Baumol and Bowen (1966), Robbins (1963, 1971), Peacock (1969) and the collection by Blaug (1976). As also happens elsewhere in economics preceding or contemporary European contributions to the economics of art have been completely disregarded in the now dominating American literature. Representative early contributions from the German-speaking area are Kindermann (1903), Lux (1906), Drey (1910), from the French speaking area Moulin (1967), Vesselier (1973), Leroy (1980), Dupuis (1980), and from the Italian speaking area Mazzocchi (1971), Villani (1978) and Trimarchi (1985). Recent contributions are Grampp (1989) Frey and Pommerehne (1989), Peacock (1983), Throsby (1994) and Frey (1994). Two books dealing with the economics of American art museums are Feldstein (1991) and Heilbrun and Gray (1993).

The present analysis is set within the confines of cultural economics, i.e. applies economic thinking to the arts. This approach to art is not restricted to financial aspects such as subsidies and cost but uses the economic model of human behaviour (see Becker, 1976; Stigler, 1984; Hirshleifer, 1985; Kirchgässner, 1991; Frey, 1992) to enlighten the social aspects of art. People are assumed to behave rationally in the sense that they react systematically to changes or differences in constraints connected to particular institutions.

As will become obvious, the present analysis in the economics of the arts differs greatly from the view taken by other social sciences, be it the sociology or psychology of art or art law. It is also fundamentally distinct from the art historians' perspective which dominates the museum world: by far the largest percentage of 'museologists' employed have had academic training in the history of art. Indeed, most art historians are not even aware that the economics of the arts exist, and when confronted with economic problems connected with the arts (of which there are plenty), they deal with them in a non-professional way.

The goal of this paper is to gain insights into why museums keep a substantial share of their holdings hidden in storage rooms, why and how they act in a restricted sphere, and what could be done to overcome this situation. New possibilities can only be suggested in a useful way after having analyzed why the situation is as it is.

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Many paintings belonging to art museums (and on these the following treatise is focusing) are never exhibited to the public and are at best available to art historians on good terms with the directorate; but quite often nobody may see them because they are stored in an inaccessible way. Some of these paintings are sometimes exhibited in the museum itself or loaned to other museums for special exhibitions, or they go onto the road for travelling exhibitions. The percentage of paintings rarely or never shown is substantial. While—for reasons to be subsequently discussed—exact data are difficult to get, it is safe to say that most museums exhibit at best half of their total holdings, and often not more than one quarter of their stock. The Prado in Madrid is an illustrative example for this phenomenon. Only 1,781 out of the 19,056 objects the museum counted within its holdings in summer 1992—i.e. not even 10%—were permanently displayed (*The Economist*, May 1, 1993, p. 97). What is kept in storage rooms therefore constitutes a significant part of a museum's holdings.

To an economist analyzing art, the question immediately arises why the stock rarely or never displayed is not sold and the receipts are not used for buying paintings more suitable for the existing collection or for other important purposes of the museum such as: restoring dilapidated paintings, extending the showroom capacity, increasing visiting hours or improving security and fire precautions. Such an alternative use of museum holdings would be to the benefit of all art lovers. These issues will be discussed in Section II: after analyzing why the museums rarely sell paintings, propositions are advanced in which the possibility of monetizing the existing stock of art is considered.

In this context a second, wider aspect of museum behaviour is to be considered. Many different constraints imposed on the museums in legal, administrative and financial terms, but also with respect to the way of thinking and acting of the museum people, influence their behaviour. More flexibility, dynamism and new ideas are to be introduced resulting in a better fulfilment of the preferences of the population with respect to art. These aspects are discussed in Section III.

II MUSEUMS AND STORAGE

Storage as a capital stock

In most art museums of the world, a considerable part of the holdings of paintings is not exhibited and not accessible, except possibly for specialists. What constitutes the major part of the wealth of an institution such as an art museum does not appear in the balance sheet; the bookkeeping procedure of art museums does not even mention that the paintings collected are of any value, although at today's art market prices, collections of even minor museums are likely to be worth dozens of millions of Ecus, and in the case of major museums many hundreds of millions of Ecus.

To economists (as well as to practical men) a museum's holdings are part of

the capital which yields benefits in various forms, in particular for the enjoyment of the viewers. The value of this capital is the price at which the paintings could be sold on the market. This evaluation serves the purpose to show explicitly the *opportunity cost* of a museum's holdings. At a (real) rate of interest of 5% per year for instance, a painting held by a museum and worth one million Ecus means a stream of income of 50,000 Ecus forgone each year, i.e. which could have been used in a different way. Thus, the painting considered could be 'transformed' into 50,000 Ecus which could be spent on hiring more guards, providing more security against theft and fire, on undertaking conservation and necessary repairs, on organizing exhibitions, on conducting art historic research or on improving the working conditions for the staff and the viewing pleasure of the visitors. Alternatively, the capital sum of one million Ecus could be used to buy one or several other paintings, or on extending the existing buildings.

As an art museum's total holdings are typically worth many dozens or hundreds of millions of Ecus, the corresponding opportunity cost of forgone income streams amount to many millions of Ecus per year. The recent dramatic rise in the general price level for paintings of old masters, of impressionists and of modern classics is reflected in a strong increase in the overall value of art museums, but also in the income streams forgone each year. Obviously, these opportunity costs are particularly important for those paintings which are kept in storage rooms and never or rarely shown to anybody. The failure to consider opportunity cost throws up the question why such behaviour takes place. The museum managers know of course that their holdings have a great value, and they cannot be assumed to be irrational. But why do rational, well-informed people systematically not account for these large sums of money?

Explanations

Six reasons will be discussed regarding the question why the museums directorate keeps such large storage without exploiting the opportunities available by selling at least part of the storage and putting the receipts to better use.

(*i*) A first explanation often adduced is that the paintings kept in storage rooms have little or no monetary value, so that a sale is not worthwhile. This is implausible when considering the huge increase in the price of paintings which are not first rate (e.g. Pontormo's 'Cosimo I dei Medici', which in 1989 fetched $35 million) or of which there exist several, almost identical versions (e.g. Van Gogh's 'Sunflowers', which was auctioned for $39.9 million). Obviously, the idea is not to immediately sell all the paintings stored by all museums—which would, of course, depress market prices, but to slowly deaccess. Selling would not necessarily have to be restricted to the paintings in storage but could also extend to the exhibition; the relevant point is whether the revenue gained by selling could be put to a better use, e.g. by buying a painting which fits better into the particular collection. In this context it might be argued that the museum decision-makers are art historians who put a value on the paintings

which exceeds the market price (otherwise they would willingly sell). Two aspects should be distinguished here:
(*a*) It is difficult to see why the *market evaluation* should deviate from the *art historic evaluation* because a large part of the demand exerted for paintings either comes from art historians themselves or directors of private galleries, art houses or art museums, an example being the Getty Museum which employs a large number of highly rated art historians among its staff or as advisers. If a particular art historian is confident that the market price currently underrates a painting's 'intrinsic' value, he or she can buy the painting at the low price and can later sell it at a higher price, an activity by which art dealers indeed make a good living. The result of such art speculation is that the two evaluations approximate. It is certainly true that an art historian holds a different evaluation from all the other buyers and sellers on the art market, but whether he or she is 'right' in the sense that all the others later follow his or her view is a matter of good or bad luck and basically the same as on a market for financial assets, say the stock market. Art historians are not in *general* better speculators on the art market than other actors, because what determines a painting's 'value' depends on many factors, including fashions, which art historians find as equally hard to predict as other people.
(*b*) An art historian as museum director may value the funds gained from selling systematically lower than the market because the revenue received by selling cannot be used freely. This is exactly the aspect discussed in the following subsections (and it should be sharply distinguished from aspect (a)).
(*ii*) A second explanation regarding the question why the storage is not sold (or why museum directors have a lower evaluation than the market) is that the government imposes a *legal constraint* to selling. Many or even most public museums in Europe are prohibited to deaccess. The government has an incentive to restrict the museum directorate in order to maintain its dependence.

A quite different thing are the voluntary contracts between the museum directorate and donors who often want to keep the collection they give as a whole and often require it to be put into particular rooms. The directorate is faced with a trade-off between receiving additional paintings and having to accept certain restrictions. If it decides to accept the gift, its value must be higher than the cost of the restrictions involved, i.e. the museum people's evaluation of having the paintings exceeds their opportunity cost.
(*iii*) A third explanation resorts to a psychological anomaly, namely *asymmetric mental accounting* (surveys are given by Dawes, 1988; Frey and Eichenberger, 1989 a, 1989b; a collection of readings are Kahneman, Slovic and Tversky, 1982; Hogarth and Reder, 1987; Arkes and Hammond, 1986). A painting that leaves the museum's holdings is considered a loss, but the potential income from selling it is not considered a gain of equal value. This may be due to lesser visibility of gains compared to costs because the latter are not dealt with in monetary terms but in terms of opportunities forgone. The perception of loss may also exceed that of the gain due to the endowment effect, a phenomenon well established in experimental research (see the surveys by

Butler and Hey, 1987; Roth, 1988; Smith, 1989). Asymmetric mental accounting is likely to exist in art but the fact that private museums (especially in the United States) do sometimes sell part of their holdings suggests that it is not very common.
(*iv*) A fourth explanation is that the museum directorate fears that the paintings sold constitute a *loss* to the art community. One such loss may be seen to occur when a painting *leaves the country*. However, there is no reason why art should not be traded internationally (see the arguments in Frey and Pommerehne, 1989, Chapter 8). Indeed, Italians have a significant comparative advantage in the trade of art because Italian artists are particularly important.

Museum people may also resent it when paintings in their holdings move into a *private* collection. To an economist this concern is difficult to understand because what matters is the willingness to pay (or marginal utility), which by definition in the case of selling is higher for the private buyer than for the public seller. Moreover, paintings in private collections are also often exhibited (e.g. Van Gogh's 'Sunflowers' by the insurance company Yasudo in Japan) and/or loaned for special and for travelling exhibitions.

In many cases, deaccessioning by one museum means that the painting is acquired by *another museum*, so that it is even more difficult to understand why a loss should be involved. Quite the contrary, the acquiring museum is more likely to exhibit the painting bought than to abscond it in its storage rooms, so that the public's exposure to art increases. Museums do indeed quite often make such transactions, but on the basis of an exchange rather than a sale. To an economist, such barter is inefficient and should be substituted by explicit monetary exchange.
(*v*) The fifth explanation regarding the question why museums do not sell the holdings not exhibited is that the museum's *administration energy* is siphoned off into commercial activities, and that the purpose of museums is therefore endangered. Art historians should pursue the conservation and exhibition of art but not monetary dealings. However, such a view is idealistic and incompatible with reality. Museum directors today spend a large part of their energy and time on monetary affairs; in particular they have to lobby with public administrations to secure their budget. This 'rent seeking' activity involves a negative sum game, i.e. in the end the actors as a whole are worse off than at the outset. The museum directors, who in Europe are usually part of the public administration, have to observe a large number of legal restrictions which also takes away energy from their art historic task. Empirically speaking, the charge that selling and buying holdings reduces the artistic quality of museums is difficult to maintain considering the fact that some of the leading museums in the United States engaged in commercial dealings are generally considered first rate institutions. An example is the Museum of Modern Art (MOMA) in New York.

The five explanations provided for the question why museums keep a large share of their holdings inaccessibly in storage rooms and do not sell are only partly convincing. The real reason for the disregard of opportunity costs lies in the particular *incentives* faced by the museum administration. This is discussed in (vi) below.

(*vi*) The decisive explanation of the behaviour observed is that the museum directorate has *no incentive* to sell its holdings in storage. It is rational not to do so for two major reasons:

(*a*) When a painting is sold, the revenue gained is not added to the museum's disposable income, but according to the rules of the public administration in most countries goes into the general public treasury. Even if this is not the case, the budget allocated to the museum is most likely to be correspondingly reduced. The politicians and the ministry of finance argue that the museum can (partly) get its own funds, so that less needs to be given by the government. The museum directorate's effort to sell paintings not exhibited thus results in a one hundred percent taxation which, of course, kills all incentives to behave in this way. A similar undesired effect of selling part of the stock is that prospective donors might be discouraged. When they give a particular painting to a museum, they want it to be kept (and their name attached to the gift), and not to be sold so that the donation becomes largely anonymous.

(*b*) Selling paintings means that the existing stock of art is at least partly monetized, which eases outside interference by politicians and parliamentarians with the museum's business. The museum directorate's 'performance' becomes easier to evaluate and the buying and selling prices of particular paintings can be compared. As long as the criteria for evaluation are exclusively of an art historic kind, the museum community is to a substantial extent able to define its performance itself. This is a useful and successful survival strategy which museum administrations do not voluntarily give up.

Proposals

On the basis of the six explanations offered above, it is now possible to suggest measures to overcome the reluctance of museums to deaccess their holdings. The museum directorate's behaviour can be changed only if the *institutional arrangements* which distort their incentives in the direction of accumulating but not selling paintings are rectified. Two proposals serve this purpose:

(*i*) Museums are administratively made *more independent* bodies which, if not fully privatized, are only subject to a very general governmental supervision. At least they must be given complete budget sovereignty, so that they can sell paintings *and* use the corresponding receipts freely for buying other stocks of art, for restoration, exhibitions etc., i.e. for any other purpose the directorate sees fit. Private American art museums are indeed active in selling and buying art in order to suit their purposes. In the period of 1988–89, 88 museums sold 1,284 lots worth $29.6 m, and 93 museums bought 142 lots worth $37.5 m (Cantor 1991, Table I.1, p. 21). The director of the Getty Museum states that 'this practice... (is) the key to shaping the collections by the staffs of many major big city museums with large collections, and others too' (Walsh, 1991, p. 26).

(*iii*) The government subsidy given to art museums is based on the 'social value' or (in economic terms) on the 'external effects' produced. Such externalities consist mainly of option, existence and prestige values (these values can be empirically measured by various techniques, one being the analysis of referenda on art expenditures as shown e.g. in Frey and Pommerehne, 1989, Chapter 11, or more generally, in Pommerehne, 1987) which the museum is not—or only partly—able to internalize. What matters is that—quite unlike today's procedures—the subsidy is *not* based on the (projected) difference between expenditures and income but on an independent measure, the external effects generated. It is thus positioned that art museums, as well as other cultural institutions, have a good case to receive public subsidies, in particular if compared to the many other subsidized institutions such as sports clubs and other forms of leisure. Grampp (1989), on the other hand, argues that no subsidy should be given.

The two proposals result in a dramatic change in incentives for the museum directorate. The income earned by selling paintings from their stocks is no longer fully taxed away and *the museum* can spend the money for those activities it thinks most important.

III More Enterprising Museums

The two proposals made above also set the incentives in order to overcome the closed and restricted sphere in which most European museums operate today. The many administrative restrictions imposed on the management of the museums are lifted off when art museums become quasi-independent or fully independent institutions. This allows them to be more enterprising and to test new concepts and ideas to the benefit of the art loving public.

Among the changes to be considered by a directorate which will be of benefit by raising the museum's revenue are: greater flexibility with respect to (a) the visitors' entry and (b) additional income sources.

More flexible entry policy

All over Europe, visitors are faced with very restrictive opening hours of public museums. In many cities for example, all museums are closed on the same day, so that a visitor cannot even benefit from one, and the *visiting hours* are short. A museum directorate interested in gaining revenue will make an effort to attract visitors by offering attractive opening hours, thus following the example of (private) service industries such as restaurants or leisure parks.

Even more possibilities exist with respect to *entry fees*. The present inflexible pricing rules (essentially one price per entry) could be adjusted to varying demand, thus allowing a larger part of the visitors' expenditure to be diverted to the benefit of the museum they intend to visit (instead of to suppliers of other goods). The principle (well known from optimal pricing theory) is that the price has to be higher, the more inelastic the demand. A museum can set about *price differentiation* in two respects:

(*a*) In times of high demand, i.e. during those hours of the day, those days of the week and those weeks of the year when a lot of people want to visit a particular museum, a higher entry fee should be charged than in periods of low demand. In particular, when large numbers of tourists decide to visit the museums in the summer, prices could be raised. The increase in revenue could be used to pay the additional cost of extending the opening hours e.g. into the late evening.

(*b*) Prices can also be differentiated between different types of visitors. For economic as well as for political reasons it can make sense to charge higher entry fees to foreign than to local visitors. The latter could, for example, be sold a ticket which would allow free visits to the museums at all times when they are not fully used, i.e. when the marginal cost of a visit is (practically) zero. On the other hand, the museum could offer guided tours through its exhibition which would be especially attractive to foreign visitors because of the suitable hours, the interesting setting and the presence of a well-known guide (e.g. a film or TV celebrity showing a collection in the late evening with beautifully illuminated rooms). Such tours could, at least in the case of famous museums, be sold at good prices to tourist enterprises which would then look after all the necessary advertising. Prices can also be differentiated between visitors who want to spend little time for the visit to a museum and those who are prepared to spend ample time. In periods of high demand, when the art museum's capacity is fully used, two entry prices could be set, a high and a low one. The high priced entry would have a correspondingly shorter waiting queue and would be used by the first category of visitors. The low prices entry option would be used by the second category of visitors, among them students and other young people who don't want to spend too much money but have plenty of time available. Price differentiation is advantageous for both categories of visitors (one gets in more quickly, the other pays less) as well as for the museum administration which can therefore raise its revenue.

Other income sources

A museum directorate which can independently determine its budget and therefore has an incentive to increase its revenue, has various possibilities to do so. Only three of the possible options will be mentioned here. They suffice to show that an art museum which can make free use of its holdings may set about activities which under today's constraints are not at all, or only insufficiently, used.

(*i*) The museum can raise substantial revenue by establishing an attractive *café* and *restaurant* as well as a *museum shop* which offers a broad set of artistic goods. New York's Museum of Modern Art (MOMA), a first rate institution, for example, covers as much as 30% of its total revenue from 'publications and similar activities' (Parkhurst, 1975, p. 85). In the period 1986–88, museums of art in the United States had total earnings of $301 m, which amounts to 17.5% of total revenue. Stock revenues were $84 m, revenues from restaurants $5 m, and other earnings (e.g. tuition charges, fees for the use of facilities) $130 m The remaining $82 m, were earned by admission charges (Rosett, 1991, Tables 6.3, 6.8, pp. 144–147). Clearly, such commercial enterprises are much to the benefit of the visitors, as any museum addict knows.

(*ii*) Special exhibitions, events and extensions of the museum can be financed by *sponsoring* from private individuals and firms. This source of revenue has, over the last years, been increasingly used. From 1986–88, private donations in the United States amounted to $465 m, or 27% of total revenue, corporate donations to $112 m or 6·5% of total revenue (Rosett, 1991, Tables 6.2 and 6.3).

(*iii*) Paintings which the museum administration for one reason or the other does not want to sell although it does not exhibit them, can be loaned. Of course, much care must be exerted, but this can be guaranteed by appropriate insurance. For example, New York's Metropolitan Museum of Art has at any one time between five and ten thousand works of art on loan (Feldstein, 1991, p. 33).

IV Concluding Remarks

The present analysis as well as some of the proposals made will meet with heated opposition from the 'museum community' and the 'world of art'. The high realms of 'art' will be set against a lowly 'commercialization'. It has been made clear that such opposition is not surprising because any change in the existing situation threatens existing interests.

Artists, however, are not necessarily against the viewpoints submitted here. Painters, especially, are often well aware of the crucial role of the art market and particularly of private galleries for propagation of their products. Indeed, from the economic perspective, private galleries are 'speculators' in the sense that they invest in unknown artists in order to profit when they get famous. As only a very small part of them *will* become successful, private art galleries are engaged in extremely risky speculations, which explains why there is such a high turnover among them with many galleries closing down every year. In a recent contribution to a monograph on public museums (Reder, 1988, pp. 25–34), the well-known Austrian artist Arnulf Rainer argued that such museums can only become lively and dynamic with respect to opening hours, amenities for visitors but also exhibition policy if they are privatized and if competition is introduced rather than suppressed. In Rainer's view, public museums should become similar to private art galleries. Expositions to 'market processes in art (would guarantee) a better choice than any public institution' (p. 32, my translation).

In this paper it has *not* been proposed that all museums should become private. The question of legal ownership is not decisive, but what matters is that the persons responsible for public museums be given the necessary *incentives* and *independence* to employ the resources and possibilities at their disposition more freely.

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