Industrial Museums in the New Millennium

scritto da Neil Cossons | 1 Novembre 2000

N.d.R.

Proponiamo ai lettori il testo della lecture che Sir Neil Cossons ha tenuto a Brescia lo scorso 27 ottobre 2000 in occasine del "2000 European Museum Forum Lecture". Cossons è Chairman dell'English Heritage, organizzazione governativa responsabile della conservazione degli edifici e monumenti storici. Per quattordici anni è stato direttore del Science Museum in London – the National Museum of Science & Industry. È stato il primo direttore dell'Ironbridge Gorge Museum, dal 1971 al 1983.

What I wish to review today are some recent trends in museums and to see how these fit with our perceptions of and predictions for the new century. I should like then to examine

the role and nature of industrial museums in this context and reflect on how they might evolve. Two metaphors offer some sort of insight into the way in which society expresses its demand for museums, the world-wide interest in contemporary art museums and the equally powerful addiction for museums of inter-active science. Both are relevant to museums of industry. And, all of this takes place in the context of a world in which museums have never been more numerous nor more popular. This in turn has generated a new and increasingly public debate about the nature of museums and their role in society.

In recent months I have heard professional museum colleagues talk of paradigm shifts in the way in which museums relate to their audiences. They have observed a rate of change in museums that is apparently unparalleled. Perhaps we should expect this. After all, we are living in an age in which most acknowledge that the rate of change in societies in general – and especially in wealthy societies – is unprecedented. I would argue that the nature of those societies is evolving as never before, a combination of increases in net disposable income, in discretionary time and a progressive reduction in the real cost of global travel, coupled with huge increases in capacity. Add to this the advent of new digital communications technologies, and look over the very near horizon to the emerging challenge posed by the unravelling of the human genome, and we can contemplate a magnitude of change that is without doubt unmatched. Much of this transformation can be attributed to the influence of two specific machines, the Boeing 747-400 and the hand-held mobile phone. Each in its own way has added a new quality of global immediacy to our lives. But it will be through genetics that real change will take place. For the first time we will be able to reveal ourselves to ourselves in a manner the consequences of which are impossible to predict. Living with that new knowledge will I suggest cause us to recalibrate the cultural parameters that have shaped everything we have so far chosen to believe. It

raises too the question of whether this seismic shift in the way we live signals the end of the Age of Industry.

Increases in net disposable income, and time in which to spend it, have been among the decisive characteristics that exemplify modern western democracies and set them apart from their pre-industrial forebears and less developed contemporaries. Free time in particular can be enjoyed as never before, on eating out, on travel and holidays, on sport, and on cultural pursuits, of which museums are an increasingly important part. And, of course, there is growing competition for people's time, compounded by improvements in mobility and access. Paradoxically, in this rich and vibrant new world of cultural diversity, many place a higher premium upon time than on the money to be spent in that time. In relative terms, we are becoming a time-poor, income-rich society. And, as museums are primarily places to which people go, the paradox is the more acute. The original object defines the central purpose of a museum. Contact with that object lies at the heart of the museum experience. For the first time more people have more time and more money to establish those seminal points of contact with the real thing. While on the one hand new technology makes second-hand acquaintance available to everyone profound questions are raised about the health of the central inspiration – of things and ideas – from which that unique museum experience derives. These new influences could have a fundamental effect on the way in which we use museums, challenging our belief in their essential values and raising questions about how we justify the retention of the original object and offer opportunities for its interrogation. This represents a new democratisation of culture but its ultimate success will depend on the sustainability of museums themselves. In sport the same sorts of trends apply.

But, having said all this, by far the most significant factors determining the nature of tomorrow's museums will be cultural, social and economic, not necessarily in that order. The

primary determinants of change will be, as now, the interests, aspirations and predilections of the cultural and political elites who govern, direct and run museums. For museums, perhaps more than any other institutions of learning, of scholarship, of enlightenment or inspiration, are the product of the providers. This is their great strength and often their fatal weakness. The people that use museums, at least for the time being, are bit players in the bigger performance. This will change as the new millennium dawns. Tomorrow's successful museums will be those that have a clear understanding of the values they represent, a vision of where they are going, and an ability to communicate that vision to a wider world. They will also have the capability of managing change, creatively and strategically. Most importantly, they will engage their audiences in determining their policies and measuring their performance.

It is peculiarly germane that we consider the future of museums here and now, not only because the new millennium is upon us and this demands that we pause and take stock but, more importantly, because museums themselves are at a critical stage in their evolution. It is a problem of success. For the first time in the history of museums we are seeing an upsurge of widespread although unfocussed debate about what it is that museums think they are for. Museums have at last arrived. They are seen to have a voice – attitude even – and so they have become the matter of legitimate public concern. The monopoly of the providers is for the first time being challenged. That must be a good thing. This is the price museums pay for the success and greater public visibility they have always wanted. Just as society has become more pluralistic so has the provision of museums. But, most importantly, museums are perhaps for the first time being seen as the intellectual property of the people who use them and those people are increasingly wanting their likes and dislikes to be heard.

In the last twenty years museums have moved from the twilight

to the spotlight of public attention to assume a central position in the cultural firmament. The world wants museums. Throughout the developed – and increasingly in the developing – world, everybody believes they need to have museums. Given that the notion of the public museum is at least 250 years old, this is astonishing. Museums are an important and extraordinarily enduring part of our culture and our civilisation. And the central purpose of a museum, in its underlying essentials, has hardly changed. Museums hold collections and reveal them to audiences. They are about objects and for people as they have always been. This mandate, to hold collections in perpetuity, is widely accepted and understood. In fact, the public's expectation that museums care properly and professionally for the stuff we leave with them is stronger than many of those who run museums generally realise. If Aunt Agatha leaves her favourite teapot to the local museum it is in the firm belief that it will be there for her daughter and granddaughter to see and enjoy. And, of course, it will always be on public display. Collections define the museum's right to permanence. It is a potent and persuasive argument.

In fact, such is the power of the museum idea that almost any place to which people come to see and understand aspires to be one. In the United States between $4 and $5 billion has been spent on new museums in the last decade((Jacqueline Trescott, 'Exhibiting a New Enthusiasm' *The Washington Post* (21 June 1998) pp A1, A16.)). Some 600 new art museums have been built since 1970((Jayne Merkel, 'The Age of the Museum' *Oculus* (February 1998) American Institute of Architects, New York Chapter.)) and in other fields the total is even higher, from the Holocaust Museum in Washington to a shrine in Clinton, Oklahoma 'for the artefacts of Route 66, a nostalgia-driven trip down the Depression-era cross-country highway of deco diners and mom-and-pop motels'((Ada Louise Huxtable, 'Museums: Making It New' *The New York Review* (22

April 1999) pp 10-15, reviewing *Towards a New Museum* by Victoria Newhouse (New York, 1999).)). And today virtually every major city in the United States has a science centre, some 300 in all, attracting 115 million visitors a year and with 700,000 families subscribing to their membership programmes((See Emlyn H Koster 'In Search of Relevance: Science Centers as Innovators in the Evolution of Museums' *Dædalus: Journal of the American Academy of Arts and Sciences* Vol 128 (1999) pp 277-296.)). As the term museum has lost its pejorative connotations so it has widened its meaning and acceptability. Today it can embrace everything and anything, from collector's *cabinet* to hands-on science, from *wunderkammer* to waxwork. In fact, the museum has become such an open-ended compendium of everything we may wish to have around us that definition has become a real issue((Neil Cossons 'The museums boom: When is a museum not a museum' *The Listener* (2 August 1984) pp 13-17.)). And, as ultimate sanctification, the word museum has become adjectival – 'museum value' and 'museum quality' have joined the enduring 'museum piece' in the lexicon of meanings.

In Britain the trend is the same((Neil Cossons 'The new museum movement in the United Kingdom' *Museum* (UNESCO) No 138, Vol 35 (1983) pp 83-89.)). The popularly quoted statistic – that a new museum opens, on average, every two weeks – seems to have held good since the 1970s. Although there have been closures, these are few in number and, as yet, none has affected any other than the smallest of museums. But the number of visitors to museums, while continuing to grow, is not expanding at the rate that museums are opening. As a result, between 1978 and 1988, the *average* number of visitors to museums in Britain fell from 72,000 per annum to 48,000((See Victor T C Middleton *New Visions for Independent Museums in the UK* (Association of Independent Museum, Singleton, Chichester, 1990) and its successor volume by the same author, *New Visions for Museums in the 21st Century* (Association of Independent Museums, London, 1998).)). These figures of course hide other

trends, most notably the significant increases in the numbers visiting large museums, especially in London. Broadly speaking the large museums appear to be doing well, as do the very small and most, but not all, of the new. The museums that are in difficulty are the middle-sized and middle-aged, short of capital for renewal and of a sub-optimal scale of operation. While the smallest will always survive, on a mixture of ingenuity and adrenalin, and the large continue to re-invest in their infrastructures and the quality of their shows, the mid-sized flounder. Interestingly, opportunities for mergers are now being explored in order to gain crucial benefits of scale or to enable scarce management and governance skills to be more widely applied((By way of example, in Britain three museums concerned with the history of inland navigation – the National Waterways Museum in Gloucester, the Boat Museum in Ellesmere Port and the Waterways Museum at Stoke Bruerne – have come together under a single governance body, The Waterways Trust, to gain strategic advantages through strengthened direction and management and co-ordinated operation.)).

The impetus for much of this new museum mania derives from two concurrent and worldwide infatuations – for museums of contemporary art and for museums of inter-active science. I should like to spend a little time looking at this peculiar phenomenon because it goes to the heart of many of our cultural attitudes towards and perceptions of what museums are for and, more importantly, whom they are for. Many of the metaphors about change and whether that change is for better or for worse can be traced through the rhetoric of the contemporary debate and offer a little insight into the way museums might evolve in the twenty-first century.

In the case of the art museum, in the last decade or two we have seen it assume a crucial iconic position in civilised urban culture that far transcends its role simply as a place to present art. It is in the art museum that the relationship

between architecture and art is peculiarly sensitive and symbiotic. We see James Stirling's Staatsgalerie in Stuttgart; in Stockholm, Raphael Moneo's Modern Museum; Richard Meier's new Getty and his other works in Barcelona and Frankfurt; Tadao Ando, with a number of art museums to his credit in his native Japan is building in Fort Worth, Texas; the Los Angeles Museum of Contemporary Art is the work of another Japanese, Arata Isozaki, and the Swiss architect, Mario Botta, was selected for the San Francisco Museum of Modern Art. The list is endless. Most significant of all, of course, has been Frank Gehry's Guggenheim in Bilbao. These signature buildings by signature architects, housing in many cases substance that is altogether evanescent, have become in their own right the most significant of cultural objects. They are museums judged as much by their architecture as their art. As the German critic Claus Kapplinger((Claus Kapplinger 'Architecture and the Marketing of Museums' *Museums International* (October/December 1997) pp 6-9.))has pointed out, it is the building rather than the collection – even supposing that there is a collection – which has become the main attraction.

And if the building is the exhibit, the name is the brand. So, Guggenheim takes its place with Gucci or Armani, or for that matter with Coca-Cola, as an international label. For $320 million the Basque government has bought into the Guggenheim brand, gambling the future of the city on culture and tourism. It seems to be paying off. In one step Bilbao has emerged from seedy post-industrial obscurity on to the world stage. But Bilbao does not own the brand. Who does, who protects its reputation, and who franchises it to others is another matter. But for the time being cities around the world with little going for them crave the name Guggenheim to lift them from the shadows. It is impossible to imagine that this will not continue to be one of the great museum trends of the new century. It may have a little to do with culture. But it has much to do with power and position ((See Nicholas Powell 'Power building in Paris' *The Spectator* (22 August 1998) pp

37-38, for an analysis of the complex political conventions that have regulated the world's most celebrated tradition of power building.)).

These museums offer new kinds of spaces with which, irrespective of what hangs on their walls or stands on their floors, people wish to be associated, as visitors or politicians, the aspiring young, corporate patrons, or the wannabes of tomorrow. It is something that those of us interested in museums of science or industry, in history or archaeology, might observe with some care. There are things that we might wish to adopt or adapt from this strangely omnipotent cultural occurrence, about style, language, tone of voice, about hierarchies, cultural positioning and social acceptability. For many however it is the whiff of elitism and the fact that these new art museums, despite what their protagonists might say, are not for the deprived, the underprivileged, or the uneducated that sets them apart. A gallery director friend of mine prohibits use of the words 'exciting' or 'fun' in any literature or publicity material about his gallery. He believes – understandably and almost certainly rightly – that their use would demean the aspirational values he has so carefully nurtured. Sir Roy Strong, former Director of the Victoria & Albert Museum, put it slightly differently but no less explicitly when he talked of his museum as a place where people could 'sip martinis among the Bellinis'.

Clearly the museum culture comes in a variety of flavours. Not all of these are acceptable to everybody. As a result the voices of dissent have been getting noisier both from within the museums community and from the outside world. As museums have become increasingly influential so the intensity of the debate about them has grown. At first sight this is about the defence of scholarship in the face of populism. But the divide is much deeper than this and the issues more complex. These culture wars are in essence between those who believe they

should have unchallenged authority over the nature of the museum experience and others who are prepared to share the notion with a wider public. Caroline Reinhardt, writing in *The Spectator*((Caroline Reinhardt 'History with attitude: Elitism is out, populism is in' *The Spectator* (4 April 1998) pp 43-44.)), is one of a succession of commentators who have entered the fray:

'There is something happening behind the scenes at the museum. A revolution has taken place in its philosophy, which would like to see the glass cases smashed. Today's museum aims to be genuinely populist. It welcomes – indeed seeks out – all sectors of the community, and eschews anything that smacks of elitism. Explanatory material (preferably using state-of-the-art technology) is pitched at the simplest possible level. And, above all, the new museum seeks to pull its head out of the historical sand to address issues in the contemporary world'.

Reinhardt drives home her point by quoting the Director of Tyne and Wear Museums((Dr David Fleming, an articulate advocate of the museum as a vehicle for social history.)) who believes that museums should play 'a proactive role in contemporary societal issues…[and] act as an agent of social change'. Social historians, new technology, widening access, relevance to minorities, the 'new museology', all share the burden of blame for making museums easy entertainment instead of offering intellectual challenge and demanding some effort on the part of the visitor. In the view of Heather MacDonald the cancer at the heart of museums emanates from 'the worst elements of America's academic culture '…smirking irony, cultural relativism, celebration of putative victims, [and] facile attacks on science'. Prime suspects are the curators in the Smithsonian((Heather MacDonald 'Revisionist lust: the Smithsonian today' *The New Criterion* (May 1997) pp 17- 31.)) and their 'embrace of postmodern theory and identity politics'.

In 1990 the Royal Society of Arts was persuaded to stage a show trial of the offenders, mainly in their absence. The press notice was revealing, identifying a wide set of anxieties((This international conference was held at the Society's House on 2 October 1990. The proceedings of the day may be read in 'Scholarship in Museums' *RSA Journal* Vol 134, No 5415 (February 1991) and include papers by Carlo Bertelli, Neil Cossons, Wolf-Dieter Dube, Michael Laclotte, Neil MacGregor and Michael Novacek.)). It asked whether scholarship was being sacrificed to the demands of storage, conservation and popularisation. Should the scholar-curator still play the central role in a museum or should he be no more important than the full-time manager, the conservationist (sic), the accounts and marketing man?' The association in the minds of many, of managerial tendencies, charging for admission and populism, working in conjunction to threaten scholarship and traditional curatorial values, formed a repetitive liturgy throughout the conference. What nobody was prepared to say in anything other than carefully encrypted code was that these people were declaring their ownership of museums and asserting a right to public money in support of that claim. And, as guardians of museum culture, they dispensed museum values to their audiences on terms that only they could determine.

If this is elitism, then it has its advocates. Interviewed in the *The New Yorker*[xv], Philippe de Montebello, longstanding and outstanding Director of the Metropolitan Museum of Art in New York, makes a spirited defence of the special values and qualities of a museum:

'Too many museums today are trying to become like theme parks or upscale shopping malls … There is a complicity in the notion that you have to compete with Disney and this is *tragic*. If you start to compete on the level of the theme parks, you are going to lose, because they can do it so much better'.

Few would argue with that, but he then goes on to describe the museum's audience, as he perceives it:

'… I hate to call it a mass audience. The numbers are not high enough, frankly, at five million visitors. If you begin to decorticate those numbers, you find that there are a great many repeat visitors – I don't mean people who come once or twice but people who come six or seven times, or even twenty times, a year. I would be surprised if our audience is as high as one million *different* human beings. And it's a more sophisticated audience than you get at a museum like the Louvre or the British Museum. A lot of the people that you see popping in and out of the Louvre have been dumped there with no foreknowledge…'.

The Met's audience in de Montebello's view does not need to be sold on the art, because the audience is, *a priori*, a cultural elite.

There is complicity here too. Museums are value-driven rather than bottom-line-driven organisations. They represent quality but, when the chips are down, they are more than happy to see their achievements measured in quantity. Visitor figures are the common currency of this debate. They can be used to present a picture of widespread, but wholly spurious, community participation. This can be highly persuasive when claims are being made on the public purse and thus the taxpayer becomes an unwitting accomplice to the myth that big numbers mean wide use by the community at large. In fact the public is often supporting a narrow fellowship of the well heeled that they are subsidising to enjoy frequent and regular use of their own domain.

The perceived values of the science centre or science museum on the other hand are entirely and almost perversely different. To their detractors they are seen as little more than fun palaces. Here children with short attention spans dart noisily from exhibit to exhibit in uncontrolled Brownian

motion. Others see issues of democracy at stake and view science centres as offering an essentially participative and accessible environment clearly focussed on the needs of their audiences. Engagement with and empowerment of the young visitor, rather than didactic teaching, and strong links into the community are often the prevailing characteristics. Janet Daley, writing in the *The Independent*((Calvin Tomkins 'The importance of being elitist' *The New Yorker* (24 November 1997) pp 58-69.)) at the height of the furore in Britain over threats to the traditional values of museums, set out the nature of the dilemma:

…the director of the Victoria and Albert Museum … argued forcibly for a more accessible image for her museum. The "ace caff with quite a nice museum attached"((To those who in the 1980s saw museums under threat from market force philistinism this slogan, coined by the Victoria & Albert Museum's advertising agents, Saatchi and Saatchi, took on extraordinary significance; it symbolised their worst nightmares.)) advertising campaign and her exhibitions for non-specialists had brought a deluge of criticism. Shrieks of "crass" and "downmarket" reverberated around South Kensington. … No one apparently is offended at the idea that a science museum should be didactic because, I would suggest, there is no shame attached in British society to knowing nothing about science. …Science…is for schoolchildren, something one grows out of with maturity and the coming of civilised tastes. C P Snow had it wrong. It is not so much that the arts and the sciences are two cultures as that science is no part of culture at all…'.

This view is not, I believe, peculiar to Britain. On the contrary, throughout the developed world the science museum – but more specifically the science centre – has espoused a populist approach. In doing so it has acquired a downmarket image, highlighted in many cases by tired and worn out fittings, exhibits that should work but don't and a

generally down-at-heel appearance of buildings and contents, all of which contrast markedly with the expensive finishes and high standards of maintenance of other museums. Poor visual design and literature that presents a well-meaning but essentially repetitive rhetoric aimed at appealing to children, educationalists and parents reinforces this still further. Janet Daley may well be right. When young people themselves view science as something they finished with as children small wonder that puberty appears to be the great enemy of the public understanding of science. Science centres, set up to inspire and engage, may in fact be laying the ground for a conscious and forthright rejection of science by the young once they become aware of more appealing alternatives.

In an increasingly visual world where – like it or not – style, design, distinctiveness, choice and quality are seen increasingly to matter, the determination of many science centres to face the other way seems like a blueprint for disaster or at least for cultural marginalisation. Indeed, a high proportion of science centres may be condemned to suffer perpetual penury as a result of their failure to meet the rising expectations of their visitors. The then Head of Research and Development at *newMetropolis* in Amsterdam, James Bradburne((James M Bradburne 'Dinosaurs and white elephants: the science center in the twenty-first century' *Public Understanding of Science* Vol 7 (1998) pp 237-253. *newMetropolis*, the glamorous new science centre in Amsterdam, designed by Renzo Piano, has the distinction of falling into catastrophic financial difficulty within weeks of its opening.)), has gone so far as to argue, in the event rather prophetically, that science centres are by their nature inherently unsustainable. Many of them will blame this on lack of funds but the real culprit is lack of ideas, imagination or understanding of the needs and wishes of people. Money will always follow inspiration.

What does all this mean for museums in general and industrial

museums in particular? First, there is the issue of collections. What has caused some museums to pause and question their assumptions about the public worth of their collections has been the worldwide spread of the inter-active science centre. The educational philosophies of the noted physicist and educator Dr Frank Oppenheimer (1912-1985)((Frank Oppenheimer was the brother of the physicist J Robert Oppenheimer (1904-1967) who directed the atomic bomb project at Los Alamos, New Mexico from 1943 to 1945.)) pioneered in the Exploratorium in San Francisco, and the stylish and immensely popular Ontario Science Centre in Toronto, both opened in 1969, have provided the inspiration for innumerable such places around the world((See John G Beetlestone, Colin H Johnson, Melanie Quinn, and Harry White 'The Science Center Movement: contexts, practice, next challenges' *Public Understanding of Science* Vol 7 No 1 (1998) pp 5-26, for a review of the growth and current trends in science centres.)). These new science centres have eschewed historical collections in favour of apparatus with which visitors – and especially young visitors – can physically engage in order to demonstrate for themselves principles of science and technology. The idea is founded on the premise that first-hand experience with scientific phenomena will captivate ordinary people and stimulate original thinking about science.

Although in a developed form the philosophy dates from the 1960s, and the decade of feverish educational reform in the United States after the launch of Sputnik in 1957, interactive exhibits as such are much older. Examples could be found in the South Kensington Museum in the nineteenth century and in the 1930s in the Palais de la Découverte in Paris and the Chicago Museum of Science and Industry. From the outset they were popular. In the Science Museum, London, the opening of the Children's Gallery in December 1931, was an important contributor to raising visitor numbers above one and a quarter million a year, a figure which then exceeded that of the British Museum((Follett p 55.)) and was second

in Europe only to the Louvre.

In the face of the inter-active revolution the position of collections in those large science and industry museums that have them has become unclear, both to the museums themselves and to their audiences ((See Svante Lindqvist, ed, *Museums of Modern Science* (Canton, Maine, 2000) for a series of essays that address key issues of objects versus messages, interactivity and historicism in the context of museums of science and technology. [Proceedings of the Nobel Symposium 112, Stockholm, 29-30 May 1999])). As a result many museums of science, technology or industry have betrayed their collections by allowing them to become marginalised in the minds of the public. Although they may have paid lip service to the value of collections as a resource for scholarship many museums have had neither the imagination nor narrative skills to bring them alive in the minds of the visitor. Mediating collections to the public is a prime responsibility of the museum. Failure to do so is irresponsible and spells disaster. Galleries of murky, incomprehensible machines mean little to any but those who made or used them unless presented with style, understanding and vivid narrative. As the generations change so the problem worsens ((See Neil Cossons 'A Perspective on the Nature of Industrial Collections' *Industrial Collections: Care and Conservation* (Cardiff, 1999) pp 9-15. [Proceedings of the conference hosted by the Council of Museums in Wales and the United Kingdom Institute of Conservation, Cardiff, 9-11 April 1997])). This is exacerbated by the inability, endemic in large museums, to renew so-called permanent exhibitions at anything like their rate of decay might demand.

Robert Bud's contention that 'meaning is inherent in objects, and a museum is therefore a storehouse not just of objects but also of meanings'((Robert Bud 'Science, meaning and myth in the museum' *Public Understanding of Science* Vol 4 (1995) pp 1-16.)) raises important questions of how far this is fully

understood by museums themselves. Why do industrial museums do such a bad job of revealing those meanings to any but true believers? Is the museum a place for collections or a vehicle for ideas? Are the two compatible? The dilemma reflects a confusion about whether the museum is object-driven or issue-driven. Is it capable of using its collections to decode messages for its public or do its stories derive from issues of relevance to its various audiences and for which its collections may – or may not – offer some degree of illumination? For museums of science and industry, and especially for those dealing with contemporary issues, understanding scientific principle or process adds a further dimension to the complex equation of revelation. It is in the industrial museum that many of these issues of purpose and practice come into sharpest focus.

Let us consider some of the characteristics that typify industrial museums as a *genre*. The opportunities are immense – to build collections as archives for research and understanding, offering powerful narratives about people, processes and technologies, about whole industrial communities, the lives of people who lived and worked there, the commodities they produced and the markets they served. Typically, many industrial museums come into existence as the industrial economy of an area is in decline, seeking to capture something of its historical importance at a time when collections can be put together with the support, knowledge and recollections (and on occasion, hostility) of people who worked and lived there. Memories of people for whom an industry held potent associations are there to be tapped and reflected back to themselves, to outsiders and to succeeding generations of scholars and visitors with the vivid authority that only first-hand evidence can expose ((See Gaynor Kavanagh, *Dream Spaces: Memory and the Museum* (Leicester, 2000) for an exploration of the 'non-rational, affective and reflective experience of encountering ourselves within the museum'.)).

And yet memories, upon which so much of recent and contemporary human history is becoming based, are a fragile and often abused resource. They can be peculiarly powerful in the context of the industrial museum. The pungently expressed memories of an industrial worker, whose image of mine or textile factory, is wholly unknown territory to all who have never experienced it at first hand, have an immediacy and personal veracity unobtainable by other means. But, as Gaynor Kavanagh has recently pointed out:

'… the elevation of the written over the spoken has overridden memory, rendered it suspect, literally the stuff of hearsay. With it has come the ignoring of those who seek to remember, and therefore loss of alternative views of ourselves and the human condition. This is most evident in and accepted in formal and official settings, where only one broad account, one main version of events, can be accepted'((Kavanagh p 44.)).

So, I suggest, in fulfilling its prime responsibility to mediate its collections to its public the industrial museum has an extraordinary opportunity to act as a test bed for redefining not only the nature of the messages it can derive from memories but the way they are transmitted and, at least as important, their authenticity within the scholarly discourse.

But industrial museums often fall short of these aspirations. Our late friend, mentor and founding inspiration, Kenneth Hudson knew this well. Frequently one would hear him, after wandering through rooms full of incomprehensible machines, laid out with numbing taxonomic thoroughness, say 'where are the people?' It was at times like this that I certainly had greatest sympathy for his contention that 'all museums are social history museums'. He would be lamenting the fact that as an outsider there was nothing in the narrative that offered him any understanding of the museum and its collections, any way into the essentially impenetrable world of machines set

out before him.

How had this come about? Let me offer one or two explanations. First, collections often reflect the professional or enthusiast interests of the museum's founding fathers (and they usually are male rather than female). In industrial museums we commonly see the issue of ownership at its most acute. In setting up an industrial museum what are its 'owners' trying to achieve? If they want to celebrate their lives they will collect things that reflect this, usually in its achievements, less frequently through its hardships. More often, enthusiasms for certain types of machines will prevail. Frequently, these will be machines that can be operated, preferably under their own power. So, almost inevitably, industrial museums become cluttered with machines, often prime movers. Before long, they become museums of engines, in which enthusiasts assemble their toys to be enjoyed on a quiet Saturday afternoon. This process of internalisation spells the death knell for many industrial museums.

A second tendency is the belief that the machines – of whatever type – need to be operated, without any analysis of what operation is meant to convey. When challenged the reply might be, 'well, it interests the children'. Again, the failure to clarify the message distorts the nature of the museum. Demonstrating, for example, the mechanisation of weaving, the introduction of the flying shuttle, and the successive improvements in the transmission of thread, may be important when the message is centred around improvements in weaving technology as a key to wider understanding but less so when the narrative traces a history in which these developments were of peripheral significance. Much more revealing might be the household belongings of textile workers and their families, the symbols of their working lives in the form of trades union banners, or the street games their children played.

But let us not be too narrowly prescriptive. A Lancashire mill engine, working in steam, might offer a tangible expression of pride in engineering workmanship, reflect the care and affection of its engineman, its central role at the heart of the mill and convey something of the capital investment necessary to keep an enterprise thriving and competitive. But, more often, information will be provided on its bore and stroke, the nature of its valve mechanism, its principles of compound operation, speed and horsepower. Little will be offered about coal consumption, advantages over rival types, or relative cost of installation and operation; still less is anything likely to be said about those who operated it, their pay and conditions or their relative status within the complex hierarchy of a large industrial enterprise. When it comes to the wider world of community, locality or region, the message may well be lost altogether. To me, this narrow focus that afflicts so many industrial museums, represents a real challenge to their existence. It reflects sectional internal interests that bear little or no relationship to historical or social circumstance or the intended audience, a form of institutionalised myopia.

This is not of course a problem unique to industrial museums; we all know the labels on exhibits or the guidebooks to historic buildings – often attracting high volumes of the general public – that are written in language so obscure that none but the subject specialist will have a glimmer of understanding about what is meant. But the issue does go to the heart of the question, who is the museum for? Meanings that attach to buildings and objects are of course fluid and determined in part by the culture of the audience. So preservation, as a first responsibility of a museum, allows reinterpretation in the future, by different means and for different audiences. That implies that there is a future, that the museum is capable of sustaining itself in the long term. Many industrial museums exist, I believe, primarily to satisfy the interests of their current ‘owners’,

the bands of people who set them up, through personal interest and enthusiasm. This becomes a particular issue when questions of longer-term viability arise. If those devotees cannot persuade, through the power and significance of their messages, through the quality, style, professionalism and cultural relevance of the way they present themselves to society at large, they are unlikely to command the support of that society, culturally, politically or financially. Contemporary art has no more relevance to the wider community than the vividly presented story of its industrial past and present, arguably much less.

In a different context one sees industrial museums that are overtly celebratory, not simply because there is corporate money behind their funding – although this is on occasion a pressure – but because that is how pride in the history of a great enterprise and in the quality of the products it produced is often seen by those who remember it as the source of their livelihoods. There is a perhaps an unconscious collusion between employer and employee – master and servant, so to speak – whereby each is engaged in a complex but mutually understood ritual of commemoration. It is in the interests of both parties that each is seen to be pursuing an honourable purpose. All over the world there are industrial museums that record and celebrate the achievements of a single company or industry. There is nothing wrong with that – on the contrary – as long as what is happening is clearly understood. It is the incapacity to understand, on the part of the museum, its staff and supporters, and the people it is there to serve that leads to dissension. The failure of the Smithsonian Institution National Museum of American History to satisfy the expectations of the Chemical Industries Association for the exhibit, *Science In American Life*, which they had sponsored, reflects qualities of misunderstanding and naivety on the part of both parties that are by no means rare ((See in particular, Alan J Friedman 'Museums, Communities, and Contemporary Science' in Lindqvist pp 43-51.)).

Other solutions to the dilemma of how to preserve and present in the museum context a more rounded history of industrialisation have of course been tried. The open air museum offers one, as does the preservation *in-situ* of industrial structures, sometimes as museums but on occasion not. The concept of the open air museum was pioneered in Scandinavia at the end of the nineteenth century as a response to what was seen as a social calamity resulting from economic decline in rural communities compounded in many instances by mass depopulation through emigration. The idea was widely taken up and today there are several hundred such museums lying in a broad swathe from Norway to the Black Sea. Inherent in the open air museum idea was the concept of 'folk culture' and the belief that the museum could preserve both the non-material – oral tradition, song, dance and music, for example – as well as the material evidence in the form of reconstructed buildings with their contents. In some cases there were of course other agendas, concerned with presenting qualities of traditional language or peasant life as symbols of national identity, or demonstrating – usually implicitly rather than explicitly – the superiority of rural ways over the pervasive power of industrial and urban culture.

In this sense the folk life movement had some of the qualities of a protest movement, its very partiality representing one of its most powerful characteristics and persuasive forces. It offers some real object lessons for industrial museums. First, it was highly 'generational' to the extent that once its founding protagonists and their disciples had died the impetus and commitment largely evaporated. Visit many of those rural open air museums today and all that one sees are the tired husks of a once vivid ideal. In that very idealism lay some of the seeds of decline; a belief that the ideal itself would sustain the museum to which it gave birth and a failure to understand the need in the future for sound governance, intellectual as well as financial. Industrial museums exhibit

similar characteristics. As Barrie Trinder has recently pointed out, like their folk museum predecessors, open-air industrial museums were initially seen in part as 'laboratories for experimentation in scholarship and interpretation'((See Barrie Trinder 'Industrial Archaeology: the twentieth century context' in Neil Cossons (ed) *Perspectives on Industrial Archaeology* (London, 2000) pp 39-56, for a critical assessment of the recent evolution of industrial archaeology and the various moves to preserve and present industrial history.)). But, once those with fire in their bellies had moved on all that is left are the dead machines, like so many stranded whales.

This raises the fundamentally important question of whether the museum, in the form that we broadly recognise it, is a valid or appropriate means of perpetuating messages about industrialisation. The museum as a medium has profound limitations. If we accept that big objects are a part of the problem of preservation and interpretation, that removing them from their context takes something from them, and that museums appeal only to a minority audience, then are there other approaches that might be more appropriate? Much of the most visible expression of industrialisation lies in buildings and landscapes. Engaging in programmes of identification, recording, legislative protection, and on occasion formal preservation, offers us opportunities to retain in the landscape elements that can be both vividly and permanently expressive of an industrial past. Efforts have been made to set up specialised trusts, not always with success. In the North East of England, for example, the Tyne & Wear Industrial Monuments Trust was established to preserve *in-situ* important sites and monuments and interpret them to the public. Its creation was in part to counterbalance the efforts of the North of England Open Air Museum which was dismantling buildings and machines for re-erection at its site at Beamish((The saga of industrial archaeological conservation in the North East of England is told by Stafford Linsley in

‘Industrial Archaeology in the North East of England, 1852-2000’ in Neil Cossons (ed) *Perspectives,* pp 115-138.)). Miriam Levin has argued that a city – she uses the example of Paris – is itself a museum of technology that can be read and understood through a variety of media[xxx]. Elsewhere major government initiatives to record and categorise industrial landscapes have enabled degrees of legislative protection to be applied that have in turn helped to move public opinion towards understanding the importance of industrialisation((Miriam R Levin ‘The City as a Museum of Technology’ in Brigitte Schroeder-Gudehus (ed) *Industrial Society and its Museums, 1890-1990: Social Aspirations and Cultural Politics* (Paris, 1991) pp 27-36.)).

A new initiative in Britain represents a direct response to the intractability of the historic industrial environment, its preservation and interpretation. Paradoxically, this has been at the instigation of the National Trust, which was set up over a century ago to preserve open spaces and historic buildings, in part because of the pressures of industrialisation. Although the National Trust has a few properties that represent industrial culture it has recognised that to venture further into industrial archaeological conservation is beyond its means. It has recognised too that preservation of industrial buildings, where the process and in most cases the equipment is no longer in place, is of limited value in terms both of conservation and understanding. Accordingly it has sponsored the setting up of the Industrial Trust which is dedicated to encouraging today’s industrial enterprises to provide public access to their workplaces. Here is a new approach to the understanding of industry, accepting that appreciation is more likely to arise from seeing the inside of a modern steelworks or manufacturing plant. Further, if this can be achieved by emphasising the need for contact with history by encouraging visits to museums and sites of historical importance, the opportunity for a more vivid and meaningful experience arises. The scheme is being

piloted initially in Sheffield and South Wales and responses have been most encouraging, both from industry itself and from audiences.

Where does this leave our thinking on the future of industrial museums? First, I suggest we need to have a clear and rounded vision of what it is we are trying to achieve in reflecting the nature of industrial culture and to whom. At least as important is some understanding of and proper planning for the sustainability of the museum as an organisation in the longer term. Third, if industrialisation is more than simply a technological phenomenon, but has wider social, economic and human implications, then a museum that fails to recognise this in its collecting and its messages to its audiences is likely to be marginal to the wider interests of the public at large. A firm foundation in the wider cultural life of the community, expressed in terms that that audience might understand and recognise, would seem to be a prerequisite. That implies a wider agenda.

At question is the relevance of industrialisation, as such, as a theme for a museum. The question is clearly a pertinent one, if only because industrial museums as such are already an endangered species in some environments. In Birmingham, for example, the Museum of Science & Industry, set up in the 1950s and containing collections that illustrate the industrial technology of Britain's 'second city', has been closed. In its place will be a new discovery centre, scheduled to open in 2001, that will present the core of those collections in the context of the wider social history of Birmingham and in an environment that invites participation and inter-action. In Newcastle-upon-Tyne the same has already happened. In both cases the words 'museum' and 'industry' have disappeared. In Manchester, on the other hand, a combination of great collections, a complex of outstandingly important historic buildings in which to house them (including the original 1830 terminus building of the Liverpool & Manchester Railway) and

good governance, direction and planning, with a secure foundation of funding from government, has enabled a museum of science and industry in the classic form to thrive and prosper, adapting to the needs of the communities it serves as it does so. So, adaptability and the capacity to evolve, without betrayal of the central purpose and – as important – of the collections, would seem to be crucial to the sustainability of the industrial museum.

All this might lead us to think that museums have lost their way. Nothing could be further from the truth. For the first time museums are questioning their own motives and, equally, they are being challenged and in some cases made accountable to the public and the agencies that fund them. This is perhaps one of the most invigorating of the changes in museum culture that we can look forward to in the new millennium. The problem, if there is one, is that some of those who work in museums don't like the answers they are hearing. The democratisation of culture and increased accountability threatens their autonomy.

Let me conclude by summarising some of the changes in museums that we can expect in the new century. As museums are seen increasingly to matter they will become the focus of more critical and analytical public debate, about their policies and their messages. Painful as this will seem to some this scrutiny must be beneficial. In particular, museums of science and contemporary history will find themselves drawn into controversy as exhibitions penetrate the traditional confines of public comfort, resulting in challenges to their long-assumed and unquestioned authorities and freedoms. In this respect the impact of the *Enola Gay* debacle goes far beyond the walls of the Smithsonian to affect museums worldwide ((See in particular Kai Bird and Lawrence Lifschultz, eds, *Hiroshima's Shadow: Writings on the Denial of History and the Smithsonian Controversy* (Stony Creek, Connecticut, 1997); Martin Harwit, *An Exhibit Denied: Lobbying the History of*

Enola Gay (New York, 1996); Edward T Linethal and Tom Engelhardt, eds, *History Wars: The Enola Gay and Other Battles for the American Past* (New York, 1996); and, Philip Nobile, ed, *Judgement at the Smithsonian* (New York, 1995), together with the reviews by William S Pretzer and Otto Mayr in *Technology and Culture*, Vol 39, No 3 (July 1998) pp 457-461 and 462-473.)). But none of this will deter museums from tackling sensitive issues; on the contrary, they will increasingly push boundaries to the limits.

Meanwhile, public expectations of museums will continue to rise as will intolerance of those that fail in their fiduciary responsibilities, to care for their collections and to make them accessible. Already, in Britain, the funding of national museums is tied to a basket of performance indicators agreed between the respective Boards of Trustees and the Secretary of State for Culture, Media and Sport((The funding agreements between the department and the museums that it funds can be seen on its website: http://www.culture.gov.uk.)). These go well beyond crude visitor numbers to include, for example, measures of visitor satisfaction, percentages of collections held in environmentally secure storage and numbers of scholarly publications. And, just as sponsors over the last twenty years have placed on museums ever tougher demands for visibility and a return on their investment, so taxpayers will expect new standards of service and initiatives to widen access to communities currently denied the benefits that museums can offer. The critical questions are, can museums serve new audiences without aggravating the old ones and will greater openness and accessibility threaten public perceptions of their authority and thus public willingness to fund them.

New popularity, challenging messages and more intense public scrutiny on the one hand and increased pressure on public money and sponsorship, together with higher levels of accountability, on the other, will all place demands on museum boards and their chief executives for which few are at present

equipped. People who run museums must pay more attention to the nature of museums as organisations. In many cases the governance, direction and management of these sophisticated institutions has outgrown not only the capabilities of the well-meaning amateurs who populate their boards but of directors and senior staff. A new quality of professionalism is now required. Without it museums will be unable to answer the critical questions of long-term sustainability that most of them face.

Crucial to successful museum governance, direction and management is the definition and agreement of objectives. These are as essential in museums as in any business environment. The concept has been difficult for some, and especially those who have thrived in the essentially sectarian structure of big museums in which their own ambitions, developed in carefully protected personal fiefdoms, could always take precedence. In the past some of the older tribal models appeared, at least superficially, to work, but this was in a less demanding age and such success as was achieved involved huge waste and duplication((Some flavour of pre-reformation museum direction, albeit of a rather extreme example, can be gained from Roy Strong *The Roy Strong Diaries: 1967-1987* (London, 1997). In a different context – London's Royal Opera House – the failure to understand the crucial role of the chief executive unfurls inexorably in Mary Allen's autobiographical *A House Divided* (London, 1998).)). Today people are paid for what they do, not for what they are. The professionals in museums are beginning to recognise that they are all equals, each with an important contribution to make ((See Neil Cossons 'A New Professionalism' [Presidential Address to the Museums Association] *Proceedings* pp 1-2, Supplement to the *Museums Journal* Vol 82 (December 1982).)). Training and staff development programmes not only for directors and aspiring directors but for all types of staff at all levels will help them to acquire the necessary skills. This will contribute to radical improvements to quality in the

museum of the new millennium.

The museum of the future will be a vibrant place. It will transcend traditional cultural boundaries, embrace rather than exclude. Its licence from society to decode the past as well as the present stands every chance of being renewed. It will offer authority without being authoritarian, nurture scholarship and make its fruits widely available, look after its audiences as well as it looks after its collections. It is the eclecticism of the museum concept, its flexibility and adaptability that is so refreshing. The museum is becoming the ultimate medium of expression – of art, of history, of science. But, it is worth our while remembering too that museums share their ancestry not only with the *cabinet* but also with the penny peepshow. Others can trace their origins to the 150-year-old tradition of international exhibitions and world fairs, which, of course, also spawned today's theme parks.

Glenn Lowry, Director of New York's Museum of Modern Art, pictures the future of his museum as a scene from the Marx Brothers' *A Night at the Opera*: 'a loud cacophonous environment in which fun is had by all'((Quoted in Victoria Newhouse *Towards a New Museum* (New York, 1999) (p 191) from Glenn Lowry 'Building the Future: Some Observations on Art, Architecture and the Museum of Modern Art', lecture at MoMA, 22 October 1997.)). And yet to go to MoMA today is to enter a cool, crisp and stylish place, not at all cacophonous, in which the E Type Jaguar and Bell 47D1((The Bell 47 helicopter was awarded the first commercial helicopter licence, on 8 March 1946. It was designed by Arthur M Young (1905-1995), poet, painter, cosmologist and author of *The Reflexive Universe* and *The Geometry of Meaning*.))helicopter take their places as cult design objects with painting, sculpture and installations.

Victoria Newhouse recognises this diversity ((Newhouse p 190.)):

‘The public museum, which began with an educational impulse and later came to represent a new secular religion, is now widely perceived as a vehicle for entertainment. Recent decades have seen an immense increase in museum attendance, partly due to mass tourism, and crowded institutions have required adjustments in design to preserve their intrinsic qualities. … To think of art as entertainment is simply a return to the astonishment and delight associated with the first private Renaissance museums: a sensuous, thought-provoking discovery quite different from the dutiful didacticism of most large contemporary institutions, where visitors often spend more time reading about the art than looking at it. The museum’s much-criticized shops and restaurants have the capacity, when handled in an appropriate manner, to serve this experience – just as jugglers, acrobats and other popular entertainers enlivened medieval religious festivals’.

In fact, the modern museum, irrespective of its theme or subject, through imaginative and professional planning, good design and programming is creating an extraordinarily persuasive and holistic dialectic in which an amalgam of collections, experiences and issues can live in happy and creative juxtaposition. As long ago as 1967 the Swedish artist Öyvind Fahlströhm (1928-1976) was convinced that museums would eventually ‘… involve theatres, discos, meditation grottoes, versions of Luna Park, gardens, restaurants, hotels, swimming pools and the sale of art replicas’((Quoted by Newhouse (p 191) from Annette Michelson ‘The Museum World’ *Arts Yearbook* Vol 9 (1967) pp 84-92.)). His ‘pleasure house’ may well become tomorrow’s museum model.

Today we might see ourselves as approaching the end of the great Age of Industry. Capitalism in the form that we recognise it today is a product of industrialisation; so too are socialism and communism. That the relevance to future societies of all three is the subject of intense debate

represents perhaps some of the strongest evidence that the Age of Industry is nearing its close. The arrival of the industrial museum and of industrial archaeology might offer some of the most powerful signals that we are witnessing a global shift in emphasis, away from an economic and social model in which industrial culture has dominated. If this is true then I believe it places real responsibilities on our shoulders – to capture the evidence of the Age of Industry and through it to reflect back to present and future audiences something of the immense influences that industrialisation has had, on technology, on the landscape, but, most important of all, on the lives of people. To achieve this the museum must seek to be at the heart of the cultural debate, in it style and design, the nature of its messages and the vividness of the way in which they are communicated.