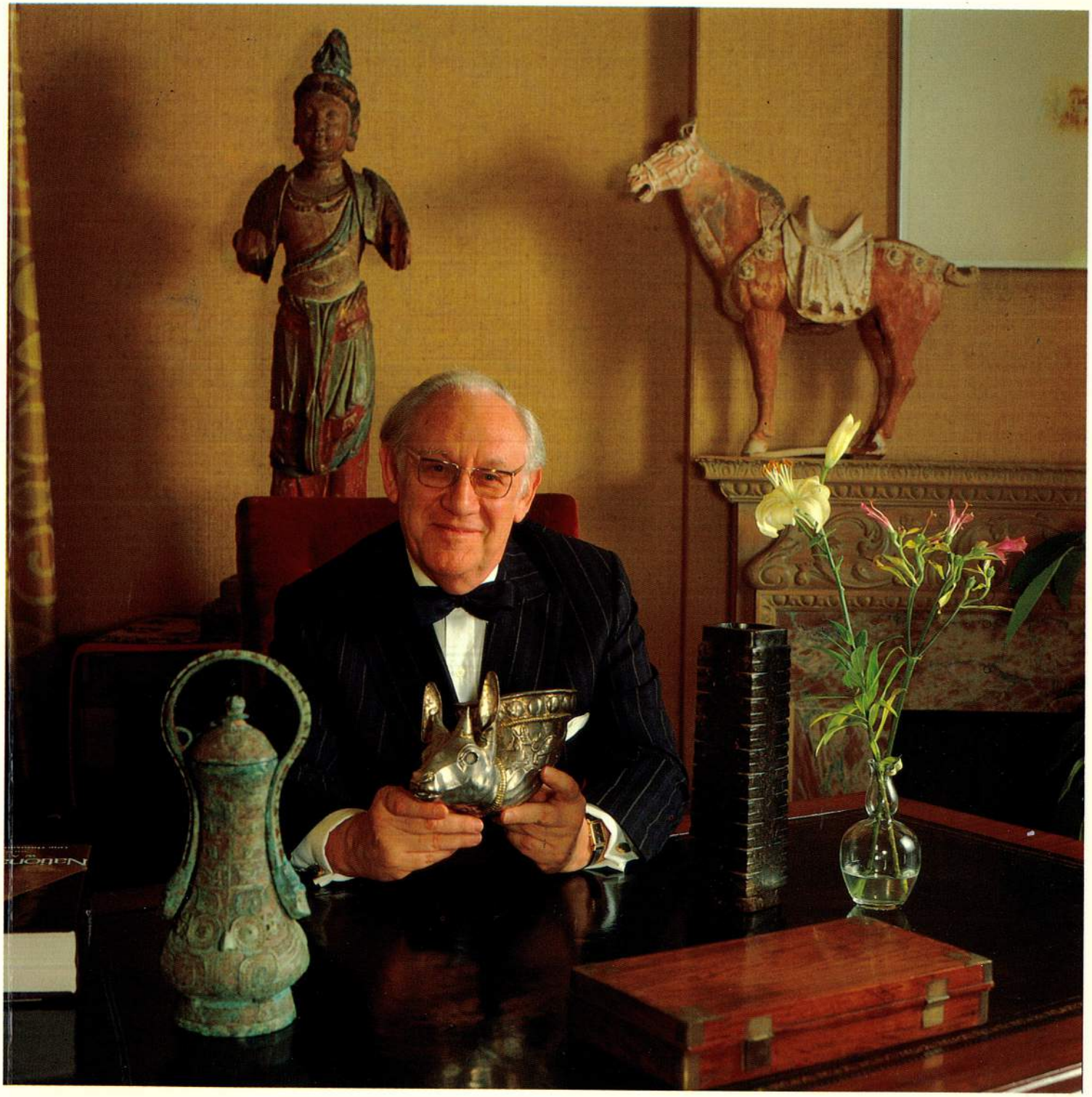
ARTHUR M SACKLER MD



1913–1987

A STUDIO INTERNATIONAL PUBLICATION

At a time when the accumulated nuclear arsenals deriving from the most brilliant minds of science and technology can destroy the world, when the responsibility for the ultimate decision of a nuclear Armageddon devolves upon the decision [of a few], we need more than ever to build links of understanding and mutual respect between peoples of different civilisations. All, in our mutual interest, must seek to reach a goal which can best be fulfilled through the building of the most important bridges between civilised men and women of culture, of all cultures — the arts, the sciences and the humanities.

It is clear that bridges must be built to unite peoples in mutual respect, in reciprocal esteem, in a shared striving for great common goals. I believe that the arts, sciences and humanities can best create those bridges of understanding essential for a world in which all people can link their aspirations to achieve their potentials and the abundances now possible to assure for all the blessings of peace.

Arthur M Sackler (22nd August, 1913 — 26th May, 1987)

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Back cover: *Large standing unsaddled horse. Earthenware under a brown lead glaze on the body. China, Shaanxi or Henan ware. Tang dynasty (AD 618 to 906). Early 8th century. Height 75.4 cm. Accession no. 72.3.317. Gift of Dr and Mrs Arthur M Sackler, the Arthur M Sackler Gallery, Smithsonian Institution, Washington DC. Photograph John Tsantes, Smithsonian Institution.*

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CONTENTS

INTRODUCTION

The dedication in September 1987 of the Arthur M Sackler Gallery at the Smithsonian Institution, Washington DC was a cause for major celebration: while we mourn the passing, on 26th May, 1987, of Dr Arthur Sackler himself, there could be no more fitting occasion by which to remember him. Nor is it inappropriate that the names of Sackler and Smithson be linked together in this his latest (but not his last) dedication to be completed. The two men shared a remarkable commitment to the future, to which each, in their own times, dedicated their lives. Only after their deaths was full recognition finally given to their prescience.

In this special publication, leading members of the arts and museums communities, scholars, musicians, and scientists of international repute are joined together in common cause to pay tribute to a great man, a visionary who sought to guide society into the next millennium.

Born in Brooklyn on 22nd August, 1913, Arthur Mitchell Sackler took a premedical course at New York University, and duly received his medical degree there. At nights he studied art at the Cooper Union Art Institute, and edited the student publications at New York University while at medical school.

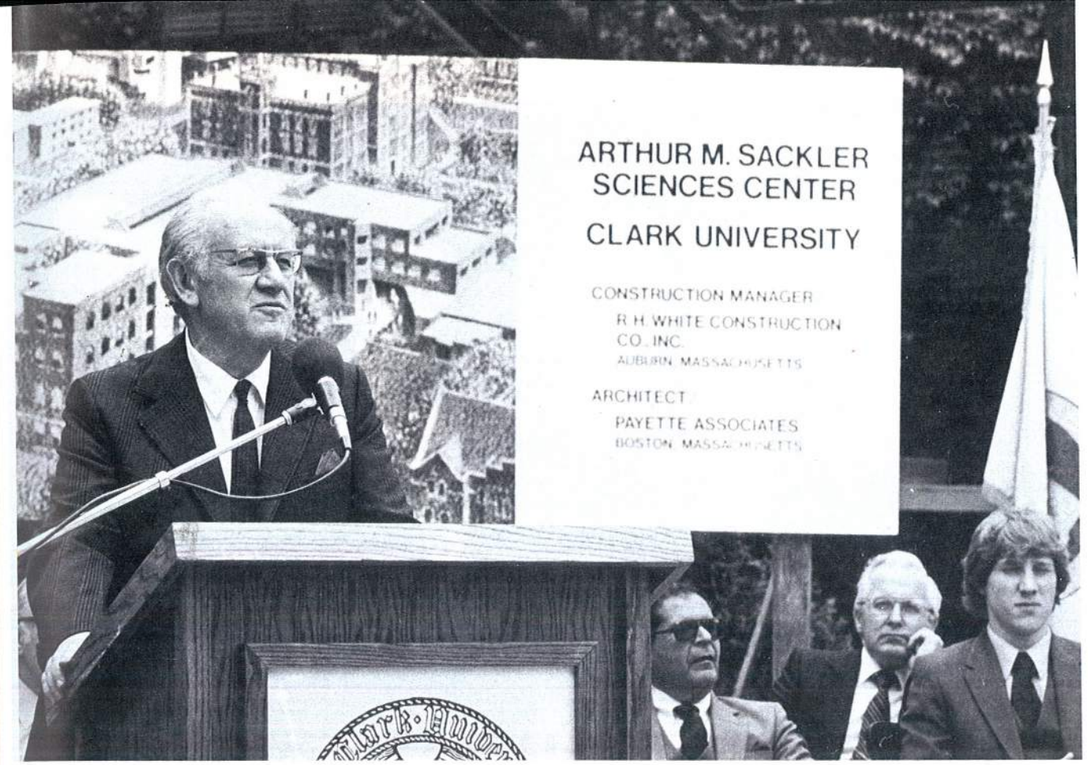
Arthur Sackler's career as a scientist was highly distinguished, as his record shows. His research began in his late twenties when he became a resident in psychiatry at Creedmoor State Hospital. Over one hundred and forty research papers in neuroendocrinology, psychiatry and experimental medicine constitute a major *oeuvre* by any standards. To the end, he maintained this commitment to laboratory research and scientific method.

The Arthur M Sackler Gallery (pyramided roof) at the Smithsonian Institution, Washington DC with the Smithsonian Institution building (the 'Castle') in the background. Photograph Jeff Tinsley.

Dr Sackler began collecting early in his medical career, as and when he could, and only after putting his two brothers through medical school and supporting his parents, themselves victims of the Depression of the 1930s.

The possessor of great intuitive taste and scholarly insight, the real root of his interest in the arts lay in the art-historical studies that paralleled his medical training: in pre-Renaissance painting, in Impressionism, and in Post-Impressionism. His interest in Chinese art related to his early interest in the Chinese people in the 1930s, when, while still a student, he raised funds in support of the Canadian physician, Norman Bethune, who cared for the soldiers on the Long March in China (1934/1935). And Chinese art, to his mind, was inseparable from early technology in that civilisation.

'For me', he once said, *'a pre-eminent function of collecting* [art] *has been the reconstruction of civilisations, of different cultures, and this goal can only be achieved through scholarly studies. In collecting, as in the sciences, when a large enough corpus of material has been gathered, a representative as well as a true reconstruction of the past can be attempted. In such a total historical reconstruction, it is vital that study materials as well as masterpieces be preserved, and the life work of other collectors is, of course, vital in this regard . . . A real collector adds a revelation, an insight, more than the sum of the collection's parts. The Chinese bronze-caster's art symbolises for me the affirmation of man's intuitive sensibilities in conjunction with two great fundamentals: skill and technology.'*



The ground-breaking ceremony for the Arthur M Sackler Sciences Center, Clark University, Worcester, Massachusetts, May 1983. Photograph Chuck Kidd Photography.

Arthur Sackler was a prodigious collector; single-minded when he had formed his objective, remarkably perceptive in assessing the object and the field; possessed of a rare intuition about authenticity. At the same time, his quest for the circumstantial evidence of beauty was pursued on a scale scarcely known to the modern world, more akin to that ancient world which so intrigued him.

One of the undeniable losses is the book that might have been written by Dr Sackler about his way of collecting: it could only have been written by him. What was reality now becomes a fable of modern times. This memorial assembles the evidence of the complete range of his artistic endeavours for the first time in one publication. Arthur Sackler was not a self-publicist and totally to be distinguished from those collectors who use the material of art as a tool of self-aggrandisement. His collections were quite distinctive in the way in which they were compiled. All formed a part of a still grander project: the exploration of the links between cultures across the world that comprise civilisation itself.

Arthur Sackler never did anything by halves: the data base which he established was immense by any standards the world has ever known, generated and created as such by the flair and ingenuity of one man. And he was astute enough, too, to give some of his collections to those institutions best able to develop further research from the superb data he engendered.

Professor Michael Jaffé reminds us, in his tribute, of Arthur Sackler's scientific passion for the authenticity of evidence, whether in testing earthenware pots by thermoluminescence, or as exemplified by the inclusion of a forgeries album in the catalogue of Tao-chi's work for comparison purposes.

Sir Hugh Casson points out how this scholarship reinforced a munificence that was not devoid of inquisition. Those whom Dr Sackler dealt with so courteously in debate could also find the gentlest prick of the needle: 'The questions were sometimes sharp enough . . . to draw a tiny bead of blood'. Truth was the invariable criterion in all that he did.

Numerous tributes refer to the human qualities of Arthur Sackler, to that vital enthusiasm for life and learning which infused all that he did. Two of his last texts, published here for the first time, go some way to explain the depths of his commitment, the wellsprings of that energy. In 'Some reflections on the arts, sciences and humanities' we are treated to the core of his perception, of his vision of a future unity of the disciplines.

The dedication of the Arthur M Sackler Center for Health Communications, Tufts University, Boston campus. From left to right: Arthur Miller; Jean Mayer, Tufts University President; Dr Arthur Sackler; Itzhak Perlman; Qian Xinzhong, former Minister of Public Health, People's Republic of China. Photograph © J D Sloan 1986.

The International Symposium for Biblical Studies, Tokyo, 1979. From left to right: Professor Hamao Umezawa, Prince Takahito Mikasa (co-host), Princess Mikasa and Dr Arthur M Sackler (co-host).

Creativity, in the next millennium, would replace territoriality; polarisation must be depolarised; cultures must display common points and clear distinctions to the researcher. Communication is of the essence.

In the essay on Charles V, his last given text, we find a skilful analysis of the motivations of the emperor as he withdrew from the world, and the observation that:

'What Charles sought and treasured was . . . the fact, the indisputable fact, that great art, great science, and the true humanities are great because they all "speak" the truth'. For *'no great art, or science, no music or poetry or performance can achieve true greatness without integrity'.*

For Arthur Sackler also, these were the vital qualities. As a collector he fused truth and integrity of purpose in the process of creativity. Beauty would speak to such as perceive it, and conventions were there to be questioned, especially academic assumptions of conventional wisdom. Might one not then add too that quality of scholarly innocence, which, combined with his astute perception, is a testament to his genius.

Lois Katz describes at length the magnificence and depth of the collections. The museums and galleries that bear Arthur Sackler's name are also reviewed in detail, in a series of articles by regular contributors to *Studio International.* We are fortunate in this connection to have contributions from Wen Zhong, the Secretary General of Beijing University, and Dr Qian Xinzhong, Former Minister of Public Health for China, and the hitherto unpublished drawings and plans of the proposed Arthur M Sackler Museum of Art and Archaeology in Beijing.

The linkages of truth and creativity have preoccupied Arthur Sackler throughout his lifetime. Lon Tuck of *The Washington Post* died within a week of Dr

J Carter Brown (left), the Director of the National Gallery, Washington DC, standing with Dr Sackler in front of the sculpture by Isamu Noguchi Great Rock of Inner Seeking *which was presented to the gallery in 1977. Photograph V Lefcourt.*

Sackler, but not before he had penned two remarkable and candid interviews and a final appreciation. Dr Sackler explained to him:

'I used to think that creativity was limited by age. But the more time passes, I have come to realise that creativity is not that age-restrained. There are fascinating examples, in terms, let us say, of scientists such as Linus Pauling. Or a choreographer, Martha Graham . . . In both cases, I think you will find a residual development of irreverence. Not for great achievements. But for conventional wisdom. I once asked Linus Pauling "What is the role of heresy in science?" and he looked at me and said "Arthur, isn't heresy the source of all real progress?"'

In collecting, as in science, for Arthur Sackler the upending of the conventional wisdom of the day was often the necessary prerequisite to progress and a vital adjunct to the creative process. For one who was already, so to speak, into the twenty-first century, the joy of experiencing beauty was an essential and calming therapy.

'When some people are frustrated, they go out and buy a new hat or a tie. When I have, I have gone out and bathed myself in something truly beautiful. So my collections are, in a sense, the measure of my frustrations.'

It was to be a lifetime's immersion in the arts. The commitment was neither to pleasure nor to power, but to the furtherance of knowledge. Arthur Sackler's whole life was devoted to building bridges between the arts, the sciences and the humanities. He had a vision of a unified corpus of knowledge. Through his collecting, he verified it.

And yet, there is a danger, as perceived by those who knew him and all of us who miss him. While he travelled through life simply, he has been all too little celebrated. The meteor, in crossing the skies, has people looking only at its trail. So there is a danger that the trail of great collections and eponymous buildings will be more celebrated than their mentor and creator. It is the purpose of this memoriam to remember the man as much as his achievements.

Accordingly in this symposium of tributes, grateful acknowledgements are due in every case where time was short. Especial thanks are due to: Mrs Jill Sackler, the widow of Dr Sackler, without whose guidance and direction this publication would not have been possible; to Lois Katz, the curator of the Sackler collections, for the selection of superb illustrations of objects in Dr Sackler's possession; and to Debbie Cruwys, Managing Editor of *Studio International,* for her invaluable role in assembling and preparing this memorial.

MICHAEL SPENS

Paul Caffell

Sir Hugh Casson

Past President, the Royal Academy of Arts, London

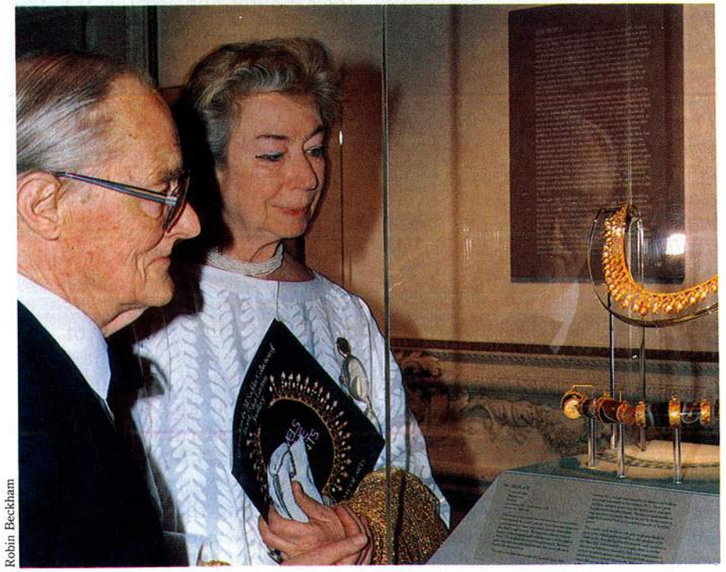
I first met Arthur Sackler about ten years ago at a dinner party he gave in Edinburgh during the festival. Beaming and benevolent, white-haired, pink-cheeked and gold-spectacled, he sat at the head of the table pouring out ideas and observations on every subject from the qualities of histamine to the casting techniques of Chinese bronzes. The conversation was fragmented by an accompaniment from a circulating pipe-major but I gathered that he liked to be regarded primarily as a scientist, secondly as a collector and thirdly as a philanthropist, an order exactly — and disappointingly for him perhaps — the reverse of his public image.

Perhaps it did not matter much for his accomplishments in all those fields were outstanding. The driving force behind it all was piercing curiosity, fuelled by tireless energy applied with equal zest to research, to publishing, to collecting or human relationships. He believed, like Ruskin, in the total interdependence of all human, scientific and natural activities.

His generosity — as many institutions in this country and elsewhere are aware — was legendary, and never confined to the writing of a cheque. He and his wife Jill liked to be involved if possible from the start, and scholars, museum directors, architects and industrialists had to be ready with their answers to questions that were sometimes sharp enough — though always courteous — to draw a tiny bead of blood.

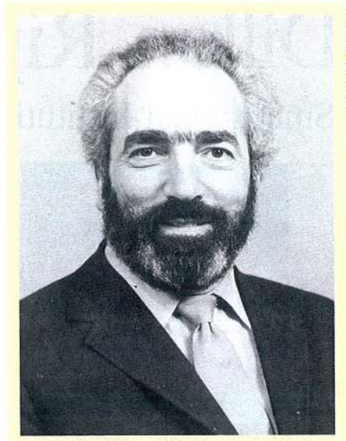
For us at the Royal Academy he was the most loyal and generous of friends. He found, I think, in our institution something to his taste. He respected its long history, its independence of government support, its unbureaucratic flexibility, the fact that it was run by active practitioners. He and Jill never visited London without calling on us and we were honoured and touched by the decision to present the first public exhibition of Jill Sackler's spectacular collection of Ancient Near-Eastern jewellery at Burlington House.

We will all miss him very much — not least for his lively interest in our ideas and activities, and for the generous enthusiasm with which he contributed to their achievement. ●



Robin Beckham

Sir Hugh and Lady Casson at the opening reception of the exhibition Jewels of the Ancients: Selections from the Jill Sackler Collection of Ancient Near Eastern Jewellery *at the Royal Academy in April 1987.*



Fitzwilliam Museum

Professor Michael Jaffé

Director, Fitzwilliam Museum, Cambridge, UK

Arthur M Sackler MD diagnosed himself in 1985, aged seventy-two in the year when I was first privileged to meet him, as 'an art-oriented, albeit primarily neuroendocrinologically biased, psychiatrist'. The orientation towards art had begun many years earlier with his medical studies. Long before he became famous as a multifarious collector of works of art, he had made his name as a pioneer in the study of psychoneurotic symptoms. Scientific training quickened those diagnostic and analytical powers which were his best equipment as a connoisseur. As a physician he healed himself by heady draughts of his own aesthetic passion.

The strength of his orientation towards art may have become noticeable to his friends in New York in the 1950s with his characteristically comprehensive purchase of the first group of Chinese antiquities to be sold at auction from the collection of Paul Singer. This interest was greatly developed by the lifelong association that followed his introduction of himself thereby to this sage among collectors; for Arthur sought not only artifacts but also the twin testaments which can be derived from ancient wisdom and from contemporary energy in research.

Nowhere was his engrossment with science and with creativity more powerfully revealed than in 'Clay and Civilisation', his essay prefacing the sumptuous catalogue of *Art of Costa Rica: Pre-Columbian Painted and Sculpted Ceramics,* from which I quoted in my first sentence. He hugged both the humanitarian history of clay and the technology of civilisations. He perceived artistic affinities; and he illustrated Rodin's *Vasque des Titans* next to his Costa-Rican *Pot Stand with Atlantean Figures* of 1,400 years earlier. No less did he make sure that the earthenware pots of his amazing collection were tested at Oxford by thermoluminescence for the age span of the last firings. If the analyses did not always match preconceptions of dating, the available evidence was not withheld.

Arthur's collections were very large and very various, formed on the principle that only from analysis of sufficiently numerous items could a sensitive historian draw rational conclusions. Problems of authenticity, and the hazards of working from unreliable premises, were never far from the forefront of his mind. He was especially proud, as we know from *Studies in Connoisseurship,* of the seven scrolls and eight albums which, to quote Wen C Fong, 'demonstrate the full stylistic range of Tao-chi's landscape, figure, and flower and fruit painting and of his calligraphy'. He wanted, and fortunately he had the means and the zeal to obtain, the largest cluster of Tao-chi's work to be authenticated (the Sackler collection also contains for demonstration purposes a forgery album of six landscape leaves in Tao-chi's style). He responded to these as a marvellous grouping saved by him from dispersals which would have wantonly robbed them of so much of their collective significance. He was at the same time too much of an aesthete not to want to pick and choose: the Chu silk manuscript of the sixth century BC, and, among the paintings, the album catalogued by Marilyn and Shen Fu as number XXV containing eight leaves of flowers by Tao-chi himself were stated preferences.

Studies in Connoisseurship, conceived in New York in 1973, travelled to Britain, to Edinburgh in 1985 and to Cambridge in 1986, where it fascinated thousands of visitors to the Fitzwilliam Museum. An exhibition of European bronze figures, a comparatively recent interest of Arthur's, will be inaugurated at the Fitzwilliam, with a catalogue by Anthony Radcliffe. That was Arthur's generous plan, and it can be carried out as he wished. He chose the individual pieces of sculpture, as he had chosen the splendid array of European terra-cottas for an earlier exhibition in the United States: but he, *vir doctissimus* though he was, was too large a person not to seek and accept guidance.

The bronzes will be shown by the Sackler Foundation at the Fitzwilliam to honour his memory. The fervid pace and scope of Arthur's collecting will be sensed, as the warmth and scale of the man himself; a philanthropist with a mission, not just a benefactor with a lot of money; a patron of scholarship in each successive field of his interest, not just a hirer of cataloguers; a contagious enthusiast, ever questing and ever questioning. He may well be missing us, as we surely miss him. ●

S Dillon Ripley

Secretary Emeritus, Smithsonian Institution, Washington DC

Smithsonian Institution photograph by Charles Phillips

I am fascinated to think of the memories that I have of Arthur Sackler. Almost the first time we really talked, he asked me to come to New York, because I had just recently met him, and we went into his office which was, as I remember, on East 57th Street, near Sutton Place. I went into the office, and we started talking and I noticed a very attractive piece of furniture on one side. I said to him, 'That looks to me like one of those pieces of Ming Period furniture made of an extinct holly, Huang Huali'. His face lightened and he asked, 'How did you know?' I said I didn't know exactly how I knew, but it just seemed to me a very beautiful thing. 'Well', he said, 'Come upstairs, I've got some more'. We wandered upstairs, and I came into a small bedroom where he showed me a wooden Kang bed. 'Well', I said, 'I've only seen one other Kang like that, also Huang Huali, and it belonged to one of my close wartime friends, Bill Drummond'. And then that marvellous expression came over Arthur's face. It shone, and he looked at me and said 'Bill Drummond, of course, but how did you know him?' And I talked about it, and that was perhaps the beginning of a series of coincidental conversations we had which lasted for the rest of his life and which always delighted me because we moved about from subject to subject without any particular reference except to interconnections of possibly humanistic or cultural or scientific purpose.

I told him about the fact that we wanted to build a museum at the Smithsonian, and he became very much interested when I described my thesis that museums are not simply charged with objects. A museum of the sort that we were considering at this time would be interconnected with events in which people would come from all parts of the world, where, still today, Americans wander like innocents abroad without any real understanding. He liked all that very much, and I think he had a very precious instinct for putting things together and making interconnections. To me, he was a fascinating person, and I developed a deep affection for him and for talking with him because of this extraordinary variety that we always seemed to become involved in and which meant so much to me. He was an inspirational person to talk with. I enjoyed all of that tremendously.

Over the years, Dr Sackler, as well as his wife Jill, became close friends of my wife and myself, especially in connection with his decision to donate to the Smithsonian Institution his collection of Chinese art. In a sense, that donation helped to trigger the project which had been gestating in my mind for a number of years since the late 1970s, namely to create a Quadrangle of space, underground, adjacent to the three classic buildings of the Smithsonian — the original Castle, the Arts and Industries Building, and the Freer Gallery — forming a square, facing out to the south onto Independence Avenue. A Quadrangle in the collegial sense would be an ideal use for such a space and would encompass two objectives.

The first would be additional space underground for, in that particular part of the Mall, the ancient buildings had been constructed on what was, in effect, a gravel bank, thus good footings for nineteenth-century buildings. This space is surrounded by at least two buildings on the National Register of Historic Places, which therefore deserve respectful treatment and proportional surrounds. Secondly, such an elegant space could be designed as a garden, and provide separate entrances into the underground galleries of two new museums.

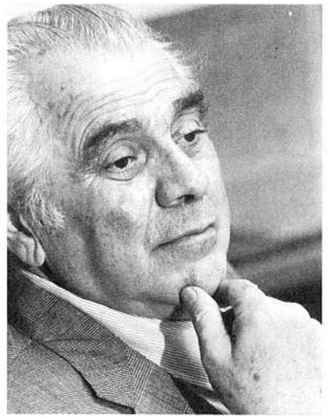
Thus, the project came into focus, conserving the legal entity of the Freer Gallery, and providing a new legal entity, the Sackler Gallery, and both would be connected. Another new museum, the National Museum of African Art, donated to us to administer by the Congress, is also in the Quadrangle. In addition, we could have more space to carry out the international aspects of these museum collections, and to create an environment uniting our outreach activities with those broad concerns.

In all of this planning and thinking, Dr Sackler and his wife and his close associate, Michael Sonnenreich, had a full exchange of ideas and concepts with ourselves. The growth of this entity in our minds has now been superseded by the opening of the collection in the Sackler Gallery. All seems in place, and it is only a matter of poignancy to ourselves that the originator of so many of the ideas and the taste that has gone into the planning of the Sackler Gallery is not with us. We can only hope, in the sure conviction that the Gallery will stand as a testament to his unique qualities as a collector and a person of judicious taste, that he will be remembered and admired in the future for his benefactions in Washington and up and down the eastern coast of the United States, as well as in places as far away as the Middle East and China.

Thus we celebrate a man of international focus, and of creative thought, who should indeed be remembered in this special fashion.

At that moment when I became agitated, talking to Jill, that he hadn't come to the opening of the Haupt Garden, I had a fleeting intimation that there might be something wrong. I hope that when the time came, which was soon thereafter, apsaras were present and were guiding his spirit to an upper plateau where it belongs. ●

This article is based on a speech presented by S Dillon Ripley at a memorial service held at Harvard University in honour of Dr Sackler. The texts of the other speeches presented on that occasion are published in full on pages 32 to 39.



Seymour Slive

Founding Director, Arthur M Sackler Museum, Harvard University, Cambridge, Massachusetts

The quality of art history instruction at Harvard is based on the special partnership of its art museums, Fine Arts Department and Fine Arts Library. The present Fogg Art Museum, which opened its doors in 1927, was designed as the principal place to house these resources but, by the 1960s, it had become appallingly inadequate to meet the needs of a vastly expanded collection of important works of art, a burgeoning library and a faculty attempting to satisfy a steadily growing demand for instruction in art history.

The *cri de coeur* for more space was partially answered in the 1970s when the Fogg raised funds needed to acquire a moth-balled University lecture hall and two modest frame houses in a block directly across the street from the museum. Renovation of them would have partially relieved cramped conditions. However, they could not answer the museum's urgent need for additional gallery space. Therefore, a design was prepared for a gallery pavilion linked to the Fogg. The Fogg's site limited the proposed pavilion to 12,000 square feet.

At this juncture Arthur Sackler appeared on the scene, and generously agreed to provide the funds needed to build the pavilion. But, as he learned more about the multi-faceted needs of the Fogg and the magnitude of its seldom-exhibited treasures, he had a new idea. At that time Harvard learned that Arthur Sackler abhorred partial solutions. Why build a gallery pavilion of merely 12,000 square feet, he asked? Why fuss with a makeshift renovation of the recently acquired buildings when the plot of land they occupy will accommodate a new museum of 60,000 square feet? Indeed, why not demolish them and construct a new museum that will provide the desperately needed galleries and expanded facilities required for teaching and research?

Arthur Sackler did more than pose these questions. He munificently agreed to provide funds for the construction of the new museum. His gift is by far the largest single contribution Harvard has ever received for the study of the arts.

The new museum, named in honour of its benefactor, opened in October 1985. Designed by James Stirling, it brilliantly combines the modern and traditional in museum architecture and offers exemplary facilities for students, faculty and curators as well as study-storage areas and spacious galleries for temporary exhibitions and the University's rich holdings of Oriental, Islamic and classical art.

People who have had close contact with Arthur Sackler know that the impulse that generated his unmatched liberality for the support of art history at Harvard does not differ from those that impelled his numerous other worldwide benefactions to institutions dedicated to the arts and sciences. His fervent faith that the arts and sciences are not competing but complementary approaches to enlightenment was unshakeable. In his judgement their advancement is essential for peace and progress. These were the dreams he treasured and his hopes for mankind. Endorsement and efforts to further his contagious faith meant much more to him than expressions of gratitude and appreciation for his princely gifts of bricks and mortar. ●

Dr Louis Lasagna

Dean of the Sackler School of Graduate Biomedical Sciences, Tufts University, Boston, Massachusetts

Arthur Sackler was a phenomenon whose enormous range of talents and contributions is not readily captured in words. His life was characterised by passionate interests; doing things by halves was inimical to Arthur's very being. His thoughts and actions were imbued with integrity and morality, but he was no rigid doctrinaire — all that it took for Arthur Sackler to change a view was to be presented with convincing facts that rendered untenable a previously held opinion.

Dr Sackler was magnificently ecumenical, equally at home with a Primate of the Catholic Church as with an atheist. He was not only a supporter of Israel, but a friend and admirer of Sadat. Trained as a scientist, Dr Sackler became one of the world's great art collectors and connoisseurs. Unafraid of controversy, he fearlessly led the medical profession in early consideration of problems of general public concern, as in his long-standing campaigns against cigarette smoking, alcoholism and drug abuse, and in his crusades for automobile seat belts.

Although never an academician, Arthur Sackler was a more effective educator of the public and physicians than most professors, via his own writings as well as by publishing the writings of others. He long dreamed of a world where doctors in all countries would have prompt and ready access to the most current information about therapy, linked in a global fellowship by modern satellite and computer technology.

Columns that he wrote for *Medical Tribune* provide valuable insights into the mind and heart of Dr Sackler. He lashed out indignantly (and with devastating effect) at superstition, anti-science, nutritional ignorance, population growth zealots, involuntary sterilisation, medical complacency, double standards, irrationality, malpractice liability abuse by the public, and neglect of professional warmth and humanity. He wrote provocatively about schizophrenia, cancer, human rights, hyperactive children, carcinogens (real and phoney), governmental arrogance, and incompetence at the Food and Drug Administration, and about such fascinating personages as the King of Sweden, Louis Pasteur, Moshe Dayan, Jacques Monod, Linus Pauling, Albert Einstein, Sigmund Freud, Carl Jung, Adolf Hitler, Goya, and Michelangelo.

Everyone who knew Arthur had a very personal conceptualisation of the man, and while these images may overlap, they are certainly not isomorphic.

The Arthur Sackler I had the most contact with was a man fiercely committed to scientific truth and to progress through research, and unalterably opposed to distortion of scientific fact for whatever purpose.

But the Arthur Sackler I was most fond of was not the publisher-crusader, not the philanthropist, not the art connoisseur and collector, not the researcher, but the much more private and primordial persona underlying these public versions. I was fondest of the man who could describe poignantly his days as a needy medical student, studying anatomy from a textbook so worn by previous owners that it was falling apart. I was fondest of the man who could recall with passion the harm suffered by those close to him during the shameful tyranny imposed on our country by the McCarthyist element of the political right. I was fondest of the man who was equally outraged by the more recent McCarthyist tactics espoused by the political left.

I submit that the reason Arthur Sackler was equally at home in the Vatican or Tel Aviv, at the Metropolitan Museum of Art or board meetings at the State Street Bank, is that at Arthur's core was a great undifferentiated human warmth, an inborn biological Geiger counter for detecting quality and integrity as well as injustice and inhumanity, and a child-like — that is a pure and unfettered — curiosity and sense of wonder at the richness and mystery of life.

I consider myself fortunate to have had the opportunity, from time to time, over a period of thirty years, to catch glimpses of the quintessential and private Arthur Sackler.

Arthur was in love with life. An incurable and tireless optimist, his agenda would have required three lifetimes for completion. But what Arthur did accomplish in one all too brief lifetime is eloquent testimony to a most remarkable citizen of the world. ●

Professor Linus Pauling

Nobel Laureate, Linus Pauling Institute of Science and Medicine, Palo Alto, California

Although Arthur Sackler can also be described as a physician, a writer, a publisher, an art collector, and a benefactor, I think of him as a scientist. Moreover, from my observations of him over the eighteen years of our friendship, I reached the opinion that he thought of himself as primarily a scientist.

I met him for the first time in London, in August 1969. My wife and I for a few days participated in the Second International Congress of Social Psychiatry, of which I was the Honorary President, and he was President. We had some discussions about the possible molecular basis of schizophrenia and other forms of mental illness, and discovered that our opinions in this field were closely related. He was the pioneer in this field, and he was proud, quite justifiably, of the contributions to science that he had made early in his career to the emerging field of biological, biochemical, and nutritional psychiatry, beginning in 1949.

In the book *Orthomolecular Psychiatry: Treatment of Schizophrenia*, edited by David Hawkins and me and published in 1973, the authors of several chapters discuss histamine in relation to schizophrenia. Arthur Sackler had discussed the biochemotherapy of histamine in psychotic disorders in several papers published in 1949 and the following years. In other chapters in the book there are discussions of altered carbohydrate metabolism and hypoglycaemia in schizophrenic patients. Sackler in the late 1940s had mentioned disruption of carbohydrate oxidation and metabolic anoxia resulting from deficiency in the B vitamins, especially thiamine and nicotinic acid, in relation to mental illness. These important ideas were published before Abram Hoffer and Humphry Osmond began their double-blind trial of large doses of niacin and niacinamide in schizophrenic patients in Saskatchewan (the first double-blind trial ever carried out in psychiatry), which initiated the modern period of megavitamin (orthomolecular) therapy.

I suggest that there is another fact supporting the thesis that Arthur Sackler was fundamentally a scientist, and only secondarily a physician. This fact is that from the beginning of my involvement with vitamins (1968, publication of my paper 'Orthomolecular Psychiatry', and 1970, publication of my book *Vitamin C and the Common Cold*) he was a strong supporter of me and my ideas. In the announcement of his death published in *Medical Tribune* there are the following sentences: 'Dr Sackler's interest in metabolic psychiatry broadened in the late '50s to a wider interest in the role of dietary and nutritional factors in the pathogenesis and treatment of disease. In the face of widespread skepticism, he was one of the first supporters of Dr Linus Pauling's concepts of vitamins as immunomodulators, capable of playing a role in the prevention and therapy of such major diseases as cancer. At Dr Sackler's direction, *Medical Tribune* was the first reputable medical publication to report fully on the work of Drs Pauling, Roger Williams, and others at a time when their ideas were viewed as marginal at best and faddist at worst. By the early '80s, however, Dr Sackler had the satisfaction of seeing these ideas enter the mainstream of medicine, with the National Cancer Institute's creation of a Cancer Control Program based on the role of nutritional factors in the prevention of malignancies, and its funding of twenty-six long-term research programs designed to test cancer prevention through dietary intervention.'

The basis for my conclusion that this fact shows that he was essentially a scientist is that the scientists, who are accustomed to examining the evidence and drawing conclusions from it, for the most part have supported me, whereas physicians and nutritionists of the old school have been sceptical or even biased. When it has been possible for me to discuss the question with a physician or old-fashioned nutritionist, I usually find that he or she knows 'facts' that are not true, the false ideas having been picked up in casual conversations or from some irresponsible writer. An example was given by Cortez F Enloe, Jr, in *Nutrition Today* in 1971, shortly after my book *Vitamin C and the Common Cold* had been published. He attended a meeting of the State Medical Association and questioned the physicians about my thesis that vitamin C has value in controlling the common cold. Every physician said that I was wrong; but Dr Enloe also discovered that not a single one of them had read the book to find out what evidence I quoted.

Arthur Sackler made great contributions to the world, in many ways. One way, the support of promising new ideas in orthomolecular medicine, involved the Foundation for Nutritional Advancement, which he had started.

Like many others who had the benefit of his friendship, I have been fortunate in having known this remarkable man. ●

Robin Beckham

Andrew Ciechanowiecki

Art Dealer, London

Some twelve years ago, during the lunch hour, a smiling, urbane, bespectacled, middle-aged American entered the Heim Gallery. I happened to be there, and he asked me 'Have you any terra-cottas?' It later transpired that, on a hunch, he had stopped his taxi in front of the Gallery, although no sculptures were actually visible from the window. We talked and I was able to show him a selection of terra-cottas, of which the Gallery owned many important examples at that time. He requested that a substantial amount of documentation should be forwarded to him. For a while nothing happened, and I did not really expect to see him again, for, on checking, I discovered that Dr Sackler's interests in collecting were mainly concerned with the arts of the Far and the Near East. After several months, however, he returned and thus a collaboration in the forming of his new collections was established which ultimately led to a close and enriching friendship.

Dr Sackler once said 'I collect as a biologist. To really understand a society, you must have a large enough corpus of data'. Hence his propensity for building up large collections, voraciously acquired and eclectically spread over different periods and media. During the following years, he created his collection of European terra-cottas ranging from the fifteenth to the twentieth century. This collection, which now boasts a splendidly produced catalogue, *Finger Prints of the Artist: European Terra-Cotta Sculpture from the Arthur M Sackler Collections,* was first shown in 1981 at the National Gallery of Art in Washington and later at the Metropolitan Museum in New York. The personal tribute which he paid to me in the catalogue and at the openings I shall never forget. His interest in, and love of, terra-cotta continued beyond this exhibition, and, just before his untimely death, he had started to assemble, together with his wife Jill, a new collection of sculptures in this medium, which was to complete, if not emulate, the first.

Soon he came to me and started to buy drawings by sculptors, and then informed me that he wanted to build a collection of Renaissance and later bronzes.

I gradually came to learn more about Dr Sackler and the candour and total trust which he placed in the dealers he worked with. His enormous knowledge of the arts of innumerable civilisations and periods, culled from his early studies at Columbia University and the Cooper Union in New York and deepened by extensive reading and museum visits, was a fund of inspiration for the various projects he brought to fruition. These projects were further enriched by his remarkable eye, taste and connoisseurship. By this time Dr Sackler had identified a few dealers all over the world whom he trusted and with whom he decided to work. A hyper-intelligent and shrewd buyer, he extracted the best from them and successfully combined their efforts with his own particular brand of patronage. He was not an easy client, but those who worked with him closely, as it was my privilege to do, valued and respected his judgement and, above all, his brilliant visionary ideas.

It was not Dr Sackler's policy to buy for himself: 'Great art doesn't belong to anybody. Never did. Never will'. He saw in art the ultimate expression of a civilisation, something to be shown and explained to the widest public. Hence his incredible generosity in lending whole collections or their highlights to museums in so many countries of different cultural backgrounds.

He was an inspiring conversationalist, with an unusual breadth of culture, full of ideas and projects with which he fired the imagination of others. The many hours of conversation during which, in his capacity as a collector and scholar, he touched upon various topics of art and civilisation, or merely broached new ideas, have given me much intellectual stimulation and deep satisfaction over the years. To know that one had his ear and trust was in itself a tribute.

As a Catholic Pole by birth and upbringing, I was privileged to know much not only about his close contacts with the Holy See and his ecumenical, scientific and cultural ideas and projects, but also about his interest in Polish contemporary art, which he first encountered at the Edinburgh Festivals. This 'art of protest', as he rightly called it, extracted from him the same generous patronage as early Chinese jades or bronzes had done in the past.

The memorial service for him, which I attended in the Sackler Wing of the Metropolitan Museum in New York paid a generous and well-merited tribute to his multifarious scientific and cultural interests and benefactions. His widow, Jill, with whom we grieve, has assumed the heavy mantle of responsibility for the continuation of the many artistic projects which he had started or had in mind.

All those who counted themselves among his friends will stand by her, as Arthur Sackler's intellectual legacy is something far too great to be set aside. We may have lost a friend, benefactor and client, but the memory of the inspiring moments we spent with him will certainly remain with us all forever and lead us to explore the many paths which he had suggested. ●

Robin Beckham

Giuseppe Eskenazi

Art Dealer, London

I first saw Dr Arthur M Sackler some twenty years ago attending an important sale of Chinese art at Parke-Bernet in New York at the end of which I was introduced to him.

He had already been accumulating works of art for some previous twenty years and his collection of Chinese art alone numbered many thousands of objects. This was unlike the behaviour of anyone I had or have encountered since; most of the important collections at that time consisted at most of a few hundred items and Dr Sackler was already something of a legend in Chinese art circles.

Over the years I came to know Arthur well, realising that, unlike many others, here was a collector who recognised and appreciated the role of the dealer in the collecting process. Whichever culture he was concentrating on at the time, and in each of his chosen fields, he relied on one or two dealers to whom he gave his total and absolute trust. His Chinese collections of lacquer, jades, bronzes, paintings, furniture and carpets were of excellent quality and most comprehensive.

In 1972 when he realised that I was after the Frederick Mayer collection – a superb collection of Chinese art in New York – he asked me to act on his behalf. I pursued the collection with added energy and enthusiasm but, eventually, it came to London to be sold at auction. Up to the day of the auction we were trying to buy it privately through the auctioneers. (Incidentally the sum he offered was higher than that eventually realised.)

When the auction did take place and we purchased thirty objects, Arthur bought almost all of the items from us within the week. They were then personally delivered by us to the Metropolitan Museum in New York, where the Sackler enclave was situated. The enclave was open to students of Chinese art and all of the objects were available for study and loan exhibitions. As soon as the objects arrived at the Metropolitan, he gave more than twenty objects, including the three most important, as a gift to the Museum. One of the three was the superb bronze *Fang-I* of the Shang dynasty. At the time this was the single most expensive object (as opposed to painting) sold at auction.

Having obtained the collections, he then needed to house them and embarked on a stupendous series of benefactions of objects and buildings to various institutions.

Before his sudden death, he saw to fruition many of his projects including the Sackler Wing at the Metropolitan where the Temple of Dendur is installed and the Arthur M Sackler Museum at Harvard University. He also had plans for a museum in Beijing. The Arthur M Sackler Gallery at the Smithsonian, which opened in September 1987, may well prove to be his greatest monument.

I was one of the few in my field privileged to help him and share his enthusiasm as collector *par excellence;* I will sadly miss this kind and generous man, as will many others. ●

Dmitri Kasterine

Cyril Humphris

Art Dealer, London

Arthur Sackler occupies a very special place in the history of collecting. There may be others who amassed more objects but there is no one who cast his net so widely and yet so well.

The quality and diversity of the Chinese collection comprising jades, bronzes, furniture, pottery, porcelain, calligraphy, painting, sculpture and other works of art would, on its own, be a monument to any single lifetime of collecting. In his case it was just one part of a huge undertaking that aimed at representing most, if not all, of the principal currents in the arts of Europe and Asia. Has there ever been a collector who set himself such an ambitious programme and who went so far in carrying it out?

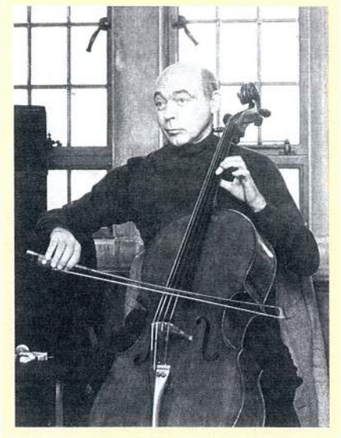
Arthur Sackler had a profound desire for peace on earth and he believed it was an attainable goal. The reasons why people collect are difficult to pin down; often for a mixture of motives sometimes contradictory. This was no doubt true of Dr Sackler but, more and more, I came to believe that, lying behind all his extraordinary diverse activities, was a grand design which aimed at bringing the races and the religions of the world closer together. Idealistic you may think, but he was a very practical man who believed in action.

It was his inspiration which led to the exhibition of treasures from the Vatican at the Metropolitan Museum and he was continually seeking ways to express the links between the Jewish, Christian and Moslem cultures. He never abandoned his veneration for Chinese art, which had been his first love, but more and more his collecting seemed to reflect the wish to show the close connection between the three main Western civilisations. He would enthuse over an Italian maiolica jar from Urbino, the freshness of its vivid colours preserved for us as it was when it left the kiln in 1530. Then he would notice the subject of Cain and Abel drawn from the Old Testament. Finally he would point out the Albarello shape which had its origins in the pottery of the Near East. It gave him great satisfaction to see the influence of the three cultures so neatly and harmoniously blended in a single object.

Arthur Sackler never acquired a work of art simply for its own sake. He always felt that, no matter how rare, unusual, or beautiful the piece, an important part of its interest lay for him in the connections it might have with other objects made at places remote in distance and time. His collections of European terra-cottas, Italian maiolica, and Hispano-Mauresque pottery were a part of an inspired plan to show the history of the potter's kiln from its origins in ancient China to the present day. He spoke eagerly of juxtaposing a work by Picasso with a Tang horse.

He was continually opening my eyes to new and unexpected ways of looking at sculpture and works of art that had been in my possession sometimes for many years. When he started his collection of Renaissance bronzes he brought to it a freshness of vision that enabled him to draw parallels between Rodin's *Gates of Hell* and the bronzes o Alessandro Vittoria.

I looked forward to his visits to the gallery knowing that I would be stimulated by a flow of ideas that touched on subjects well outside the confines of the art world. I miss him. ●



T Charles Erickson, Yale University, Public Information

Janos Starker

Cellist, Bloomington, Indiana

When the final biography of Arthur Sackler is written it will chronicle his life and achievements. The chapters will be full of essential data, and his own writings will occupy many pages. From the vantage point of a friend, who knew him for only a few precious years, the data and achievements count little in the memory. It is fairly easy to have a real or qualified respect for someone who succeeds in amassing wealth. The newspapers, whose focus is often on questionable traits, weaknesses or hidden motives, thrive on success stories of inventors, investors, speculators, corporate raiders, timely star entertainers, and so forth. History proves that none, including bona fide saints, led lives of godly purity.

What set Arthur apart from many was that he never lost touch with the reality of his origins. He never lost the joy of a child in discovering daily the wonders of life and beauty. He cherished an eternal hope for betterment — betterment of people and betterment of the world he lived in. He treasured and loved to see and touch every object made by an artist or an artisan. He tried to understand as much as possible about the motivations of human beings in creating beauty, whether in China, India, Mesopotamia, Africa — wherever. When he spoke of science he could hardly contain his excitement about the possibilities a new research or discovery might mean toward a healthier, happier world.

When he listened to music the tears in his eyes were from joy, but also from frustration — frustration and sorrow that the perception of beauty was not universal. As a realist he knew his limitations, but he knew his strengths as well. He knew that he would not be able to truly change the world and mankind around him, but he did what few men do. He used his capacities to contribute as much as possible in the limited time he had. Had he lived longer the chapters would have been multiplied and more clearly defined, dreams fulfilled.

Personally I will hear forever his remark after many concerts, the only remark worth remembering. 'Thank you'. And so, dear Arthur, for having been a friend and having been a unique human being, thank you. ●

Camera Press Limited, London

Lorin Maazel

Conductor, Monte Carlo, and Music Director, Pittsburgh Symphony Orchestra

The web of a friendship is woven with threads spun in uncounted encounters — during a casual exchange of a word or glance, a handshake, a shared joy, and laughter. Arthur loved to laugh, though not at a person or a thing. His laughter arose in sudden recognition of an incongruity, of an odd juxtaposition and, most often, as an expression of joy in a discovery. Arthur was forever discovering: a thumbprint on a sculpture; a relationship between a tune, a pot and a word; a similarity of thought between a proto-this and a proto-that; a parallel between an ancient Chinese squiggle and a Babylonian tracing. Trace he did, looking for cells of a connective tissue that would bind all humans into a rational order, that would reveal a collective intelligence and an identifiable pattern to human effort.

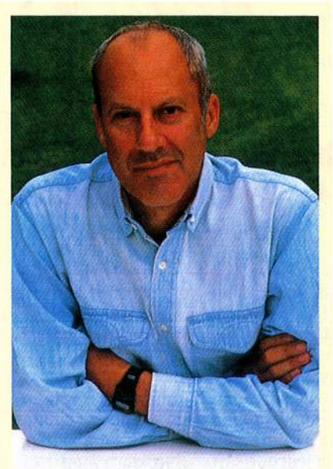
The pattern of Arthur's life was clear to his friends: a design to heighten Man's awareness of himself as a divine instrument. Arthur's instrument was his intelligence, sharpened by wit, perspective, love of life, respect for his fellows. I have been privileged to have laughed with him, to have shared many joys, to have shaken his hand, to have exchanged thousands of words and glances of comprehension, and to have spun with him our own web of friendship. This web, having withstood the sorrow of his untimely passing, continues to strengthen and sustain me in the wish to follow his example whenever I can. There can be no better example to follow. ●

Norman Foster

Architect, London

The memory of Arthur Sackler is for me a source of continuing inspiration. Through his personal insights I was privileged to share a new way of looking at the historical past, as well as being offered a glimpse into the potential of a future rich in fresh possibilities for the arts and sciences — disciplines which in his vision were wonderfully united. He was an irrepressible optimist and perceived the approach of another Renaissance, in which a new culture of leisure could bridge the many divisions of present-day society.

I met Arthur at the time when he, with his wife Jill, was making possible a new gallery complex for the Royal Academy in London. This venture followed a pattern of other projects for the arts that his enlightened patronage was achieving around the world. As an architect I have long professed that I am only as good as the client or patron behind the project. In that sense the working relationship with Arthur, albeit tragically brief, was one of those rare high points in one's life when the creative process is shared with a kindred spirit and the boundaries of design issues are stretched to their limits. It was a flattering experience because, apart from the pleasure of such exchanges, his own creative contributions gave one the illusion of enhanced personal ability.

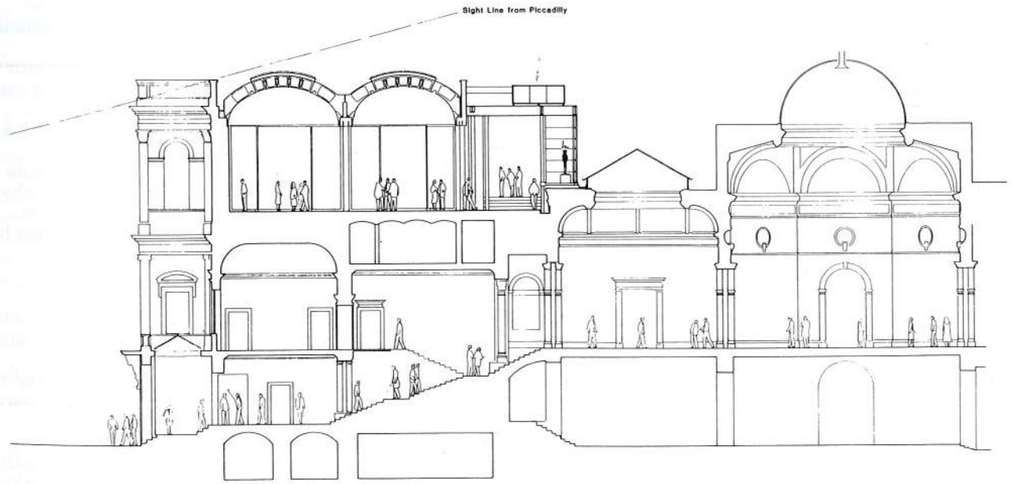


Foster Associates/Andrew Ward

It is difficult to convey in mere words that kind of rapport; it was tantamount to an unspoken language in which values for such concerns as function and visual form became totally shared. I remember his saying, on more than one long-distance phone call, words to the effect that, 'we don't really need to meet to discuss this — we share the same wavelength'.

The heritage of completed projects is testimony to the extent of the generosity of Arthur Sackler as a benefactor. However, what I personally became sensitive to, and indeed humbled by, was the true measure of that generosity in a different sense — the extent to which he gave of himself so totally and unselfishly; his wisdom which was both scholarly and outgoing; his keen eye; his consideration for others; the hard-working zeal of his self-imposed schedules which would have been impressive for a man half his years; his contagious enthusiasm, zest for life and absolute integrity. ●

The Royal Academy of Arts in London recently announced an imaginative scheme to renovate their galleries in Burlington House, made possible by a gift from Arthur and Jill Sackler. Lord Burlington's original house dates from the 1660s, and the Royal Academy expanded northwards in 1860 by building a large additional set of galleries. The new architectural plan, devised by British architect Norman Foster, RA, provides for the creation of a vertical gallery which links Burlington House to the structure, and for the renovation of the old Diploma Galleries. There will also be a separate gallery for the Michaelangelo *Tondo,* the most prized possession of the Academy. Norman Foster and Arthur Sackler immediately formed a close friendship and working relationship based upon mutual respect and admiration.



Section drawing of the Royal Academy of Arts, London, showing the proposed extension. Architects Foster Associates.

Dr Solomon H Snyder

Director, Department of Neuroscience,
Johns Hopkins University,
Baltimore, Maryland

Many people think that the sciences involve different mental processes than does conventional artistic creativity, but really there are far more similarities than differences. And I think this is especially apparent in Arthur Sackler's own major contributions to biological psychiatry.

I came to know Arthur through his research even before I started medical school. I was in college and working in laboratories at the National Institutes of Health during the summers on the role of histamine in allergies, and so read Arthur Sackler's publications on histamine from the 1940s and 1950s.

I first met Arthur in the late 1960s at a biological psychiatry meeting. I was impressed not only with what he had accomplished in his earlier research, but with his ability to encompass the complex morass of biological data, simplify it and see common threads. Over the years I have come to realise that this is what distinguishes creativity and biomedical research. The challenge is to find things that don't seem to have to do with each other, put them together and then, out of the simplistic, elegant, aesthetic, simple concepts, make predictions that can cover diverse fields. And this was very much so in Arthur's work.

Arthur and I continued as friends over the years. In recent years, we attended together the Monell Center for Special Senses in Philadelphia each year for the board meetings. The dinner would always be at the Philadelphia Museum of Art. And Arthur would regularly take me on a tour of the museum. He educated me in the history of the art and the collections of the museum. I was his best student, the one person he could drag around the museum for a whole hour while the others were having cocktails

About this time I was also learning art history, because it was my daughter's field of concentration at Princeton. I noticed that the strategy of looking at the complexity of different elements, putting them together into simple concepts and seeing widespreading ramifications, was equally apparent in Arthur's thinking about art as in his thinking about science.

To give you an idea of how his contributions of simplifying things had many direct ramifications, let me review some of Arthur's contributions to biologic psychiatry.

From some research published in 1952 came Arthur's prediction that glucocorticoids, such as cortisone, medications for diseases like arthritis, allergy, and asthma could cause psychosis; and indeed they do. That is the major limitation, in fact, in the use of these important medicines. Psychotic conditions such as mania and depression develop.

Arthur predicted at the same time that those agents would be useful in psychosomatic illnesses, conditions such as ulcerative colitis. And indeed, they are life-saving in those conditions.

He defined a series of biological differences between schizophrenics and non-schizophrenics, based on his research, starting with histamines. He predicted that cortisone would have a different effect on neurotics than on psychotics. In those days, people used to say that if you are neurotic and anxious, that means you are a little bit crazy. If you are a little more crazy, then you are psychotic and schizophrenic.

Arthur could see that there was something very wrong in that paradigm of mental illness. There is no continuum; there are discrete illnesses. The psychoses were one set of illnesses and the neuroses quite different which, of course, is now generally accepted in psychiatry.

Arthur's initial observations in the 1940s at Creedmoor State Hospital, together with his brothers and other colleagues, started with the finding tha histamine administration caused fewer effects in schizophrenics than in non-schizophrenics. Thus, schizophrenics are resistant to the effects of histamine Many things followed from this, such as an examination of the effect of histamine in treating schizophrenia.

In the 1940s, far fewer chemical substances in the body were known than today. But it was apparent then that there was a histamine-like system and a cortisone-like system which somehow were antagonistic to each other. He called them antidynes. And as the different hormonal systems wer clarified, such as the thyroid system, and the gonadal hormones, he tried to put them into that framework.

We now know that this is indeed the case. In fact, the histamine-like system causes allergic symptoms, and the cortisone-like system from the adrenal glands antagonises them.

Arthur then applied this approach to the brain, predicting a ying and a yang two opposing systems in the brain. Now, we know the brain is regulated b chemical messengers called neurotransmitters. The human brain has about ten billion neurons, and how we think and how we feel involves those neurons talking to each other by releasing chemicals called neurotransmitters.

Are there only two neurotransmitters? No, there are many more. Most people feel that there are eighty to one hundred different neurotransmitters in the brain. And as they built up in numbers, people starte asking, how are we ever going to explain behaviour? How are we ever going to put things together to explain global functions of feeling and thinking if we have all of these discrete systems

Well, now matters are starting to simplify, and what is extraordinary is that it is coming back towards what Arthur was thinking about. You see, those chemicals are released by neurons, recognised at specific receptor sites on adjacent nerves. But that recognition must be translated into 'second messengers' that change the neuron's function. There are only two major second messenger systems. One is called the cyclic AMP system, and the other, the phosphoinositide system. The two second messenger systems have many similarities in their formal mechanisms, but they seem to work in opposing ways. It is only in the last two or three years that it is becoming apparent that these two systems are like the ying and the yang, the opposing systems that Arthur Sackler was predicting.

All this is not only of theoretical interest. These findings are important for understanding what is going on in mental disturbance and for developing drugs that are relevant for brain function.

Most major drugs that are used in psychiatry act at the initial recognition sites, called receptors. Now, with a greater appreciation of the second messenger systems, it may be possible to have drugs developed that act via these second messenger systems. If there are only two of them, then the brain is not as overwhelmingly complicated as some thought. This makes it possible to understand how the brain integrates functions like emotions because we can localise major groupings in this relatively simplified system.

Let me give you an example of a very important drug in psychiatry that we can understand in this fashion. This is the simple metal ion lithium. Lithium is one of the miracle drugs in psychiatry and until recently it had been virtually impossible to understand how it did what it did.

Lithium was discovered in the late 1940s by an Australian psychiatrist named John Cade to be effective in treating mania. He gave modest doses of lithium to manics, and in a matter of days to a few weeks their symptoms would abate.

Before that, hyperactive manic patients were treated with sedating drugs which basically knocked them out. These drugs did not do anything fundamentally to the disease. It was like hitting the patient on the head with a sledgehammer. Lithium, on the other hand, would normalise them. It would bring them down from their manic state, but it did not depress them. It did not knock them out.

Lithium does more than just relieve mania. For certain forms of depression, lithium is very effective, better than conventional antidepressant drugs. And even more remarkably, if you have a manic depressive patient and you treat him or her chronically, prophylactically with lithium, you prevent mood swings. You prevent the oscillations into extremes. Lithium is a normalising drug.

It was hard to explain that action because usually people say if you are manic, you must have too much of a high chemical. And so, a therapeutic drug should block that high chemical. And if you are down, you have too much of a downer chemical in the brain, so a drug should block the downer chemical. So, how could you have a drug that does both, that normalises the situation?

This is explained by understanding the second messenger systems, the kinds of systems that Arthur predicted. The phosphoinositide system is a biochemical cycle, literally a circle. Lithium inhibits one of the critical enzymes and thus blocks the phosphoinositide cycle. It slows down this second messenger system.

Because the phosphoinositide system is a second messenger for multiple neurotransmitters, it can subserve the neurotransmitter which might be increased in mania, and it may also subserve the neurotransmitter system, a different one, that may be hyperactive during depression. By dampening this cycle, one might dampen whatever neurotransmitter is overactive. Whether it be mania or depression, lithium elicits a normalising effect, dampening the excessive oscillations.

This was not Arthur's only work. What is extraordinary about Arthur is that he was interested in all sorts of things. Let me give you an example of some of his later research. He was always interested in areas of public health policy and how technological changes might have consequences we do not anticipate.

In the 1960s, vasectomy became very popular. Everybody was having a vasectomy believing it was completely safe and could not affect gonadal function. Arthur wondered about that, and even though he was involved in so many other pursuits, he did research in his laboratories and wrote a paper which was published in *Science* magazine in 1973. And in this paper he showed that in rats subjected to vasectomy the normal testes shrank.

People did not pay much attention. People went on and on and on with vasectomies. In 1985, the *New England Journal of Medicine* published a story on human beings subjected to vasectomy showing the abnormalities that Arthur had predicted fifteen years earlier.

Arthur was indeed a creative individual who will be sorely missed. ●

Musical Tribute at the Kennedy Center Concert Hall

The following speech was presented by actor Ron Silver on the occasion of a concert held at the Kennedy Center on 12th September, 1987 in celebration of the opening of the Arthur M Sackler Gallery in Washington DC.

'Fortunate children and youths, they go their way in a kind of intoxication. They see the world as a storehouse of which they should take possession. There's nothing in the world that their wills cannot overcome.'

Your Excellencies, Ladies and Gentlemen. Good evening. Goethe wrote these words about children, but he could have been talking about Arthur Sackler, who, even at seventy-three, never lost that youthful intoxication with life's possibilities. He had so many amazing accomplishments, and he was, in the true sense of the term, a 'Renaissance man'.

We are here to celebrate the opening of the Arthur M Sackler Gallery, and the life of the remarkable man for whom it is named. Tragically, Arthur did not live to see this event, on what should have been the greatest weekend in his life. He died suddenly of a heart attack last May. He was in the midst of a creative burst of genius which, as his wife Jill said, had seemed to indicate that he was in the prime of his life. He was a cherished friend of mine, as he was of Lukas Foss, Sherrill Milnes, Paul Plishka, Byron Janis and Janos Starker. We are proud to take part in this tribute to him.

Let me tell you something about him, for those who weren't lucky enough to know him. Arthur was a research psychiatrist, an art scholar and collector and a builder of medical schools and research institutes, art museums and galleries, both in the United States and abroad. He was one of this century's most generous benefactors. So many institutions were touched by his friendship. There are the Sackler School of Medicine at Tel Aviv University in Israel; the Sackler Institute of Biomedical Sciences at New York University and the Sackler School of Graduate Biomedical Sciences at Tufts University, both of which confer their universities' MD-PhD degrees; the Arthur M Sackler Sciences Center at Clark University; and the Arthur M Sackler Center for Health Communications at Tufts, a state-of-the-art facility that joins medical communities worldwide through new technology.

These were just some of his contributions in the scientific sphere — he did

Ron Silver.

equally as much for the arts and the humanities. He gave a large part of his fantastic art collection to museums and universities around the world, and also endowed a number of institutions to house the art. He donated to the Metropolitan Museum of Art in New York the Arthur M Sackler Stone Sculpture Gallery, and initiated the Sackler Wing, which houses the Templer of Dendur and the Sackler Exhibition Hall and Galleries for Asian Art. In 1985, the Arthur M Sackler Museum opened at Harvard University and in the coming years, the Arthur M Sackler Museum of Art and Archaeology will open at Beijing University. There are Sackler galleries at Princeton and Columbia Universities. This is all in addition to the opening of the splendid museum here that houses more than one thousand beautiful objects from his collection.

'It is a privilege, not a charity, to be able to share one's joys and pleasures with others', Dr Sackler said about his gifts. Anyone who was with him at one of his museums, schools, or centres would share in this infectious enthusiasm about his projects. At the opening of his museum at Harvard, Dr Sackler described his enthusiasm by saying, 'I think the excitement remains because each of the projects has a distinctive character of its own, even though they all are linked — they're linked in terms of my conviction that the arts, sciences, and humanities must all work together.

His attributes were many — a brilliantly creative mind, a superb memory, energy, persistence, enthusiasm, optimism, courage, integrity, and the desire to be constructive and helpful, and an eye for the beautiful. He was equally knowledgeable in the world of arts and sciences.

He was fourteen when his parents lost their money in the Depression. With the force of energy that was so incredible, he went to work to support his parents and family. While at Erasmus Hall High School, he was an editor of the student publications, and he held similar posts at college and later at New York University Medical School.

As a pre-med undergraduate at New York University, he studied art history and English drama. In the evenings he studied painting and sculpture at Cooper Union Art Institute. By the age of twenty-eight, he was Managing Director of Schering Chemical Co in addition to serving as a practising physician.

Arthur felt that his most important contribution had been in the sciences. He was a groundbreaking researcher into the metabolic basis of schizophrenia. In 1949, he founded a research institute at Creedmoor State Hospital, and later that year published his first scientific paper. His one hundred and forty papers have established his reputation as a significant investigator and pioneer in biological psychiatry, for which he received many awards. Last year he was honoured by the National Academy of Sciences.

Dr Sackler wrote in 1951 that he was anticipating the 'next era of psychiatric advances' which would 'provide us with biologic techniques as aids in diagnosis, prognosis and therapy and arm us with additional therapeutic advances. Then and only then', he wrote 'will our diagnoses be firmly based on precise etiologic forces and our control of the disease process related to precise pathogenetic mechanisms. Then and only then will psychiatry be graced by biochemical specifics. It is our conviction that, today, we stand on the threshold of a new era of the science of psychiatry.'

Arthur's interests broadened in the 1950s to include a concern for the role of nutrition in the treatment of disease. He set up a foundation to fund research into dietary factors in the prevention of malignancies and sponsored a major conference on Chinese nutrition that has revolutionised nutritional studies there.

Arthur had wanted to be a doctor since he was four years old, and through his research and his communications network, he helped to improve the health of millions throughout the world. His weekly medical newspaper, *Medical Tribune*, which is printed in eight languages, reaches over one million doctors per week, and was the first publication of its kind. This was a major innovation which brought health news to doctors around the world and is credited with saving many millions of lives.

In his student days he bought his first art object at auction, an American painting, which, to him then, was a large sum of money, seventeen dollars and fifty cents. He went on to Impressionist paintings, but when they became too expensive he looked around for something else. It was in 1950 that he saw a small table in a modern furniture shop, liked its simple shape and found it was Chinese, 'Ming', dating to about 1600. His passion for Chinese art was ignited. Afraid that it was too late to find significant pieces, he expressed his doubts to an elderly Chinese dealer, Mr Yao, who responded, 'Dr Sackler, you will not have to seek Chinese art, you care so deeply for it that it will find you'. Prophetic words, as Arthur was about to amass the most important private collection outside of China.

Arthur collected art because he loved it. In fact, he never sold a single piece. He made all the selections of his objects himself without assistance from advisers and art experts.

His art collections are vast and wide-ranging, and include objects from China, and India to the Middle East, from Pre-Columbian and Pre-Renaissance periods through European terra-cotta and bronze sculpture, maiolicas and paintings.

Tonight we especially salute Arthur's efforts towards peace. He was to have received a World Peace prize in 1988. He was working behind the scenes with several governments, formulating various proposals to promote peace, such as ecumenical exchange visits by religious leaders, and a 'space for peace' programme to ensure that the latest information on science and health be available to all, particularly the peoples of China, South America and Africa. He believed peace depended on the cooperation of China and the United States. His long and excellent relationship with the peoples of China began at the time of the Long March, when he collected money to help their struggle against oppression.

Arthur's brilliant mind often focused on global, philosophical issues, and

Lisa Berg

Byron Janis (left), Paul Plishka (below left), Sherrill Milnes (below centre) and Lukas Foss (below right), with the Indiana University Philharmonic Orchestra, perform at the Kennedy Center in a special concert to celebrate the opening of the Arthur M Sackler Gallery in Washington DC.

through his weekly column 'One Man and Medicine', he was able to share with millions of doctors his thoughts on every subject, including health, philosophy and world peace.

My relationship with Arthur grew out of a shared interest in, and a respect for, the Oriental world, particularly China, and I suspect that what underlied his belief that peace depended on the cooperation between China and the United States wasn't political in nature but rather was based on a meeting of two very different minds — our sometimes excessive individualism tempered by the Oriental respect for preservation of the group. Politics is more like an art than a science. Statistics prove facts are far less formidable than coercion or persuasion when you are arriving at the subjective truth. Arthur once wrote: 'I believe that the arts, sciences and humanities can best create those bridges of understanding essential for a world in which all people can link their aspirations to achieve their potentials and the abundances now possible to assure for all the blessings of peace.'

Dr Michael DeBakey, Chancellor of Baylor College of Medicine, said after Dr Sackler's death, 'We talk, perhaps glibly sometimes, of a Renaissance man. There are very few — but Arthur Sackler was surely one of them. He was a scientist, a researcher, a clinician. Independently of his other interests, he had made his mark as a researcher. But beyond that, he had a tremendous interest in history and art; and he shared his great art collections with the world.'

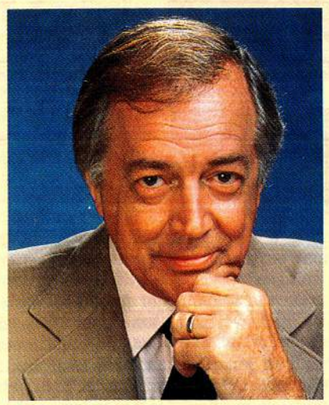
On the founding of *Medical Tribune*, Dr DeBakey said, 'It was an extraordinarily innovative idea, and not many realised initially what he was trying to do. But Dr Sackler was a man who pursued excellence in any field he put his mind to, and he was determined that *Medical Tribune* would be a journal of the very highest standards. And this he accomplished. In many ways, *Medical Tribune* is probably the best medical publication in the English-speaking world. It is regarded as in many respects the way to keep up with what is happening in medicine.'

This was just a sketch and some of the bare facts of Arthur's life, not his reality. The reality of any man is how you feel in his presence. I think, perhaps, this was Arthur's greatest gift. In his company you felt elevated — his love, enthusiasm, his child-like sense of wonder was infectious. He made me, and I'm sure many others, feel that life was a gift and not a given.

In the Jewish tradition one cannot aspire to sainthood. The highest achievement is to become a *tzadik* — a righteous person. Arthur, from my perspective, came as close as anyone I know. Albert Einstein, another great American, a scientist and humanist, once observed 'Is there not some satisfaction that there is an end to life so that at its completion it may be viewed as a work of art?' Arthur's life was a masterpiece. ●

IN MEMORIAM

On Wednesday 17th June 1987, five hundred people from the worlds of the arts, sciences and humanities gathered together in the Sackler Wing of the Metropolitan Museum of Art, New York for a moving memorial service to Dr Arthur Sackler. The texts of the speeches presented on that occasion by Dr Sackler's friends and colleagues are published here in full for the first time.



Hugh Downs
Presenter, ABC News, New York

We are gathered here together this afternoon in a memorial tribute to Arthur Sackler, to celebrate his life, and to attempt also a gesture of gratitude for his life having touched our own lives in various ways and having left the world a richer place because of his years in it. Arthur Sackler possessed and wielded an incredible diversity of talents. His creative contributions to the arts, sciences, medicine and the humanities have often been listed, never overstated. He pursued excellence and more often than not achieved it in every field that he put his mind to. One outstanding trait of Arthur's was his lack of possessiveness about his talents or his resources. I always had the feeling that Arthur Sackler never really owned anything because he was so ready to share everything. It was more important to him that you or I enjoy a work of art or a scientific or philosophic nugget or a medical fact than that it was his, or from him. He was about the business of loving mankind which is what the word 'philanthropy' really means. His amazing life should have been documented for television. I had intended to do so one day. Like many others, I feel privileged to have known him, and honoured to participate in this tribute in this magnificent setting.

John Cardinal O'Connor
Archbishop of New York

One of my favourite stories in the Old Testament is the story of the defeat of King Antiochus IV, the Syrian king, by Judas Maccabaeus. This victory was celebrated by what was to become the Feast of Lights, the Jewish Feast of Hanukkah. We are told that on the twenty-fifth day, Judas Maccabaeus took what appeared to be enough oil to burn one night, but miraculously it burned eight nights in celebration of this great victory. Today, as you know, it is the Jewish custom during the eight days of Hanukkah to light a candle each night on the menorah. But what strikes me particularly is that the servant candle is used to light each of the others. This, to me, was more characteristic of Arthur than anything else. He spent his entire life as a servant candle, in your service,

in my service, in the service of countless numbers of people of the world. And he did it as though there were only enough light for one night, and therefore he was going to burn it fully. Miraculously, it lasted through all the years until very recently.

As a Catholic priest, privileged to be the Roman Catholic Archbishop of New York, I count as one of my highest privileges to have come to know Arthur Sackler, and as one of my highest pleasures to have been called his friend.

Arthur Ochs Sulzberger
Chairman, Metropolitan Museum of Art, New York

On behalf of the staff and the trustees of the Metropolitan Museum, I wish to extend my deepest sympathy to Jill and other members of the Arthur Sackler family. Most appropriately we are gathered in the Sackler Wing of the Museum. In addition to this magnificent room, the Sackler Wing houses the Museum's new galleries for Japanese art on the second floor.

Arthur Sackler was an extraordinary many-sided man — doctor, businessman, writer on many subjects, philanthropist, and one of the nation's leading art collectors. His ideas, his vision and his benefactions animated this Museum for many years and he left an impact of permanent significance here and in many other institutions as well. As we mourn his loss, we celebrate his life.

Edward Koch
Mayor of New York

Jews are not usually eulogised in a synagogue or buried from a synagogue. Why this is, I don't know, but in fact that is the case in most situations. Arthur built his own synagogue, cathedral, and it is really extraordinary that this should have occurred. It is a tribute to his memory that the very place he built, glorious as it is, is the place in which we are engaging in this eulogy. Arthur and I were good friends, and I know life meant a lot to him. He enjoyed it. And he enjoyed the collecting, the giving, and the ceremony that went with the giving, and the participating in the events that were very important — the elevation of the Archbishop of New York to become Cardinal. Jill and Arthur Sackler were there. I was there. We enjoyed that because it was participating in a special part of life that many people never have the privilege of entering. What Arthur has done with his collections, and with his foresight in those collections, and with his foresight relating to how they should be distributed here, in foreign countries as well, has created a memory that will go on forever. When I gave him the seal of recognition,† he deserved it many times over. More important than the seal of recognition that I gave him is the seal of recognition that you give him by your presence. I am sure he likes the fact that you are in his temple.

†In 1982, Dr Sackler received the Mayor's Medal for Contributions to New York.

John Brademas
President, New York University

Thinking about what I might say this afternoon, I recalled a recent issue of *Daedalus*, the journal of the American Academy of Arts and Sciences. In his introduction, the editor wrote: 'Determining the relationship between art and science . . . at least in the modern world . . . becomes a formidable task . . . art and science are best understood as two vast and largely independent domains, at least in the twentieth century'. Yet few persons in the twentieth century roamed with such remarkable ease and such mastery between both these domains as did the extraordinary man to whose memory we pay tribute today.

Arthur Sackler was blessed with such qualities of intellect and imagination, energy and enthusiasm, that boundaries of time, place and culture could not contain him. I like to think how much Thomas Jefferson and Arthur would have enjoyed one another! I well remember the first time I met Arthur and his lovely wife Jill. Appropriately enough, it was here at an opening at the Metropolitan Museum of Art at the top of the main staircase. Struck by his effervescence and zest and aware of his strong ties to New York University, of which I had recently become President, I felt that Arthur should become a member of the Board of Trustees of his University, and I am delighted to say that he did so. The election of Arthur Sackler to our board five years ago was the culmination of his long and faithful relationship with New York University for he took his bachelor's degree from our College of Arts and Science and went on to the NYU Medical School, from which he graduated just half a century ago.

Others today will speak or have spoken of Arthur Sackler's many contributions to business, the arts and to medicine. Let me simply recall his generous benefactions to New York University and that, beyond his significant financial support, Dr Sackler also gave invaluable advice and counsel as a member of the Student Affairs Committee of the Board of Trustees.

I am not unaware that, to some people, Arthur Sackler was, perhaps because of his extraordinary range of accomplishments, a bit intimidating. I must say that I myself found him a genuine delight — witty, charming, vivacious and creative.

Both as President of New York University and as Arthur's friend, I extend to his children, to his brothers, and to Jill, my deepest sympathy. We of the family of New York University count ourselves fortunate that our university — *his* university — was touched by this gifted and giving man.

Arthur Sackler was blessed with such qualities of intellect and imagination, energy and enthusiasm, that boundaries of time, place and culture could not contain him.

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Jean Mayer

President, Tufts University, Boston

Our memory of Arthur Sackler will always be that of his presence, his enthusiasm, generosity, warmth and vitality, of the intellectual stimulation of every conversation. These qualities pervaded everything he did, and he did just about everything. Arthur came close to the definition of a universal mind — scientist, clinician, writer, publisher, educator, entrepreneur and business man, artist and collector, visionary and good friend. Above all, perhaps, he wanted to share his interest with everyone else — with questioning students, with heads of governments, great artists. I am sure it is a large reason why he went into publishing *Medical Tribune,* nurturing it into a major international organisation, part of the business enterprise which nurtured his philanthropies.

I was introduced to Arthur by a mutual friend, Louis Lasagna, whom I had met in a dusty southern military post where we had gone to testify to no avail at the trial of a medical officer who had refused to train Green Berets, which we considered to be a violation of the Geneva Convention. Arthur expressed a desire to meet me and we became friends. I had known of him as the publisher of the *Medical Tribune,* and through his pioneering research to try to find the biological basis for psychiatric problems at a time when psychiatry was ruled by Freud. I came to know Arthur much better and he became interested in what we were doing at Tufts. I knew he had established the Sackler School of Medicine in Israel, together with the Laboratories for Therapeutic Research at Long Island University, and other institutions. Arthur and his brothers founded the School of Graduate Biomedical Sciences on Tufts' Boston campus.

In education, as in all else, Arthur was a pioneer, fascinated by the past, and happy in the present, but his mind dwelt most often in the future. He was an educator and communicator, so he began to be involved in the planning of Tufts' new science library and teaching building. Arthur not only helped financially to complete the building that bears his name, he also participated enthusiastically in the planning of the network and suggested important teaching activities for the Arthur M Sackler Center for Health Communications. He left us intellectual charges and opportunities which will extend long into the future. The Center, incidentally, received from Arthur some inspiring paintings, including a striking vision of Maimonides painted by Ben Shahn which put his artistic and ethical imprint on his biomedical efforts.

I last saw Arthur only a few days before his death. He was embarked on a new enthusiasm and a typical one. He was looking at the possibility for a Society for Special Skills to encourage innovative applications of rehabilitative medicine. We talked about what it would take organisationally and financially to make the blind see, the deaf hear and the paralysed move.

I shall miss him very much as a challenging colleague, as an explorer who could reach out into the future and pull it closer to the present but, most of all, as all of us here, just as a friend who made our world a happier and more creative place to live in.

Itzhak Perlman

Violinist, New York

I remember when I last saw Arthur and Jill. It was at our house and we were talking about a variety of subjects and, of course, art was something that was so close to him. I remember just before they were leaving I said with great enthusiasm, 'Would you like to see my new acquisition?' It was a Stradivarius violin that I had just got hold of, and he of course replied with great enthusiasm that he would. It was a great honour for me to show it to him because he was a man who has seen so much beauty in art. So he looked at it and he admired it and I feel privileged that I am here today to let Arthur hear it in his own house. So this is my offering to you, Arthur, of a Bach Adagio.

Robert McCormick Adams

Secretary, the Smithsonian Institution, Washington DC

One of its central, moving spirits was missing when the Smithsonian's great Quadrangle complex of underground museums and other activities opened in late September 1987. Dr Arthur Mitchell Sackler, whose unsurpassed private collection of Chinese antiquities forms the core of a magnificent gift now permanently housed there in a gallery bearing his name, had died just four months previously. He was an exemplar as well as a supporter of all of the unities of creative life whose advancement lies at the heart of our mission.

It is of course a matter of regret that Arthur did not live to take pleasure in the inauguration of what turned out to be his culminating gift. But already, long before, his had become an extraordinary record of patronage that spanned the arts, sciences and humanities. Highly successful as an entrepreneur in medical publishing and other fields, he pressed ahead with visionary new funding commitments that kept pace with, and at times even threatened to outrun, his wealth.

Arthur's own career was as wide-ranging as his patronage, including an early chapter as a pioneer in biopsychiatric research. But it was as a great collector that we knew him best — a collector committed to the unfettered public enjoyment and scholarly appreciation of the objects it was his passion to acquire. In the weeks before his death he was especially troubled by the recent explosion of prices on the world art market, which has the disturbing implication that public museums are more and more hard-pressed even to enter the bidding. Had he lived, it is likely that he would have played a powerful, behind-the-scenes role in a national effort to assure that at least the greatest treasures to go on the block would find a permanent place in the public domain.

So it is natural that in remembering him I should turn to the prefaces that he wrote in the many-volume series by which his collections are also being made permanently accessible. Having sought in his own research 'to convert psychiatry from a "soft", subjective science into a "harder", more objective science of metabolism and biochemistry', there is perhaps an irony in his personal emphasis on the discerning eye of the connoisseur. 'A real collector adds a revelation, an insight — more than the sum of the collection's parts', he once observed on a *Smithsonian World* television programme.

But the intellectual rigour of the researcher remained the same, and some compensation for subjectivity was sought in a determined, costly effort to add to the mass of observable examples:

> For me, a pre-eminent function of collecting has been the reconstruction of civilisations, of different cultures, and this goal can only be achieved through scholarly studies. In collecting, as in the sciences, when a large enough corpus of material has been gathered, a representative as well as a true reconstruction of the past can be attempted. In such a total historical reconstruction, it is vital that study materials as well as masterpieces be preserved, and the lifework of other collectors is, of course, vital in this regard.

Chinese archaic jades and the great Shang and Zhou ritual bronzes were perhaps his most abiding interest, with deep understanding as well as admiration reflected in his references to their 'subtleties and nuances', their 'exquisite intimacies and secrets' and the 'soul-fulfilling aesthetics' of Chinese art more generally. The bronzecaster's art, in particular, for him symbolised an unrivalled technological mastery over beautiful but refractory material,

> an affirmation of Man's intuitive aesthetic sensibilities in conjunction with two great fundamentals: skill and technology. It represents, in the early days of Man's civilisation, a supreme manifestation of the power of such a combination.

This linking of technology with art, of science with the humanities was, in a sense, the lesson of his life. 'Art is a passion pursued with discipline' he observed to his television interviewer, while 'science is a discipline pursued with passion'. Seeking 'to experience as close as one can, at first hand if possible, the creative impulse which moves a master' in either of these domains, he found it

> among the most exquisite expressions of what Man can create — out of dead mineral and intense fire — seeking to fulfil visions of imagination with discipline and experience. They are also a triumphant demonstration of how one people can speak to all people; how artists can speak to everyone across the void of time and vastness of distance; and how a past civilisation can relate to the present through the power of its art . . . There is an intrinsic unity in Man's aesthetics, even as there should be a unity of respect and understanding among all humankind.

The gallery that bears his name will carry on its functions in precisely that spirit. All who met Arthur Sackler were struck with his love of learning and his earnest wish that others might share his enthusiasms through the great gift of his collections. He will be sorely missed.

Robert Adams' speech at the Memorial Service was modified for publication in the *Smithsonian* magazine (October 1987) and is reprinted here.

O E Nelson

Dr Paul Singer

Physician, Psychiatrist, Collector

For those who know nothing about me, I am Dr Singer who has been a physician for fifty-eight years. I'm a psychiatrist. I have collected early Chinese art for seventy-two years, having bought my first object when I was twelve years old. Western art preceded that. I came to this country in 1939. In '57, I decided to sell a few objects, bronzes, at Parke-Bernet. On the following day I had a call from somebody at Parke-Bernet who said 'a gentleman who bought all the objects you consigned to us has asked whether he could have the name of the owner. It is not our policy to do that, but we are calling you to see if you would accept this idea'. I said, 'go ahead, tell him'. The next day I had a call from a gentleman who introduced himself as Dr Sackler and he said, 'I have bought all the things you consigned to Parke-Bernet. I believe we have the same interests and perhaps the same taste. I would very much like to meet you and we could cut out the middleman'. And he came to my home, and I met a very eager pupil with many questions, and these were the first objects, apart from the furniture, that he ever bought in early Chinese art. I enjoyed teaching; we had a wonderful time.

Our relations continued and, after I don't know how many months, I did decide to sell a few more things. They were archaic Chinese jades. I called Arthur and said, 'Would you be interested?' Yes, he was, and we met and I showed him the things. When he held the first archaic jade in his hand and his eyes beheld it, it was like an electric charge to this man. And the consequence, not too surprisingly, was that in a very short time he had acquired the greatest collection of archaic jades of top quality ever assembled since the beginning of mankind in one hand. I have never counted them, but there are about a thousand or fifteen hundred such objects.

The spark had caused a conflagration. Our relationship continued over the many years, which now is thirty years. We agreed on many things and we fought a great deal. I am a very critical person. I am a heretic. I am an iconoclast. It was difficult sometimes to get along with me. But it seems that all of these fights and arguments strengthened our friendship to the very very last moment. Arthur has gone out of my life. He will not be forgotten. May he lay in peace.

J Carter Brown

Director, National Gallery of Art, Washington DC

Arthur came into my life and the institution's life in an unusual way. A man who had been helping us with the conservation of African objects, Jim Silverman, in a show called *African Art in Motion,* many of which needed attention, said he had been doing work for a collector of African art, whose name was Arthur Sackler. African art? I knew of the Sacklers' involvement at the Metropolitan in the Oriental field and Jim said, no, he is also in Pre-Columbian. Well, none of this sounded like anything we collected at the National Gallery, which is a rather specialised institution, but he sounded like an interesting person to meet. He came to lunch back in the directors' dining room in the old West Building which has now been converted into a conservation lab. The topics of conversation were pure Sackler. They ranged around the globe and through the millennia and I felt this was one of the most unforgettable people I had ever met. I couldn't see that there was any institutional benefit for the National Gallery, but I could see that, from a personal point of view, this was a guy I would like to get to know better. I told him we did have a man in Washington who was very interested in bridging between worlds, between art and science, who happened to be the Secretary of the Smithsonian, S Dillon Ripley. And so it was arranged that I set up a meeting between Arthur and Dillon. The rest is history. What fascinated me about this man was his ability to bridge worlds. Then it turned out he had developed this great terracotta collection. We showed that, we showed his maiolica collection, and now we have the European bronze collection scheduled.

The topics of conversation were pure Sackler. They ranged around the globe and through the millennia and I felt this was one of the most unforgettable people I had ever met.

Sherrill Milnes

Singer, Metropolitan Opera, New York

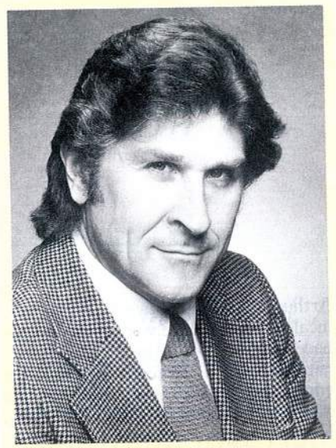
Nancy and I are very privileged to add our words to all those spoken here about our dear friend, Arthur. Arthur at any occasion always meant vitality, enthusiasm and crackling energy. It was wonderful after a performance seeing Arthur making his way through the crowd, brimming over with joy and excitement, totally unabashed by his partiality: 'Greatest thing I ever heard, I loved it'. At the same time he was always enquiring, always questioning, always learning.

What is so ironic is that this person should have died *in media res.* Perhaps it is typical of our age, and particularly of Arthur, that we should find someone at seventy-three 'falling before his prime'. But from his point of view, he was only half way through. The ideas he had were absolutely extraordinary. He would call me up more often, I should think, than anyone else connected with the National Gallery. My telephone logs are filled with Arthur Sackler calls, all coming in mysteriously at a time when I was just thinking about one of the subjects he mentioned. He was, I believe, psychic, and after a while it got to be more than coincidence.

And so, for a man who has bridged worlds, I know of no one who was more interested, not only in the past, but in the future. The long-range future was, it seemed to him, just around the corner. He was a man who thought in billions of years, which we know from his dedication speech at Harvard. He had a sense of connections, and connections that bind us not only in space, and to time past, but to the millennia ahead.

He sat in my office just a couple of weeks ago and said, 'Carter, you know, unlike some collectors we know, I am not immortal.' Well, Arthur, you weren't often wrong, but you were that time.

Waring Abbott



And yet he was always the teacher. I will always feel Arthur's hand on my arm, saying, 'Did you know . . .' and then he would tell me a lot of things I didn't know about research, history, art, people. As Arthur recently said about himself, 'I am most of all a student'. He was a student of learning, a student of appreciation, a student of science, a student of people. Most of all, we knew him as a friend, a *Mensch,* a loving companion to Jill. We will miss him. We will miss his sweeping enthusiasm, his joy of living and the warmth of his comforting, caring love.

George Lang

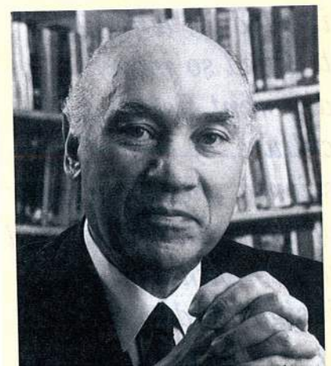
Musician, author and restaurateur

The problem with eulogies is that to describe a person is to diminish him, but in Arthur's life, love — that overused word love — was a leitmotif throughout his life:

- Love of beauty
- Love of the chase of the elusive
- Love of a good fight
- Love of loving
- Love of life, mostly the love of living fully
- And the love of big dreams.

If life is a loan — as Delacroix, someone Arthur admired so much, said — if it's a loan, he has paid the highest interest to the good Lord.

Whenever I see a piece of art, hear a good tenor or sip a Bordeaux with a burnished taste, I will remember Arthur with his eyes glittering, raised eyebrows and an infectious smile on every inch of his face, and it will heighten my pleasures — as he did for so many throughout his life.



Dr Frank Press

President, National Academy of Sciences, Washington DC

It is a measure of Arthur Sackler and his contributions that so many different aspects of human endeavour are represented here today. I would like to say something about Arthur from the vantage point of the National Academy of Sciences. I first met Arthur some three years ago leaning against the wall in the Great Hall at the National Academy of Sciences in Washington. It was during a coffee break at one of our symposia. After a few minutes of social niceties, Arthur burst out, 'This is a fantastic meeting. You have a great institution here but I must tell you, you haven't achieved your potential. The wisdom your organisation generates reaches only a small fraction of those in this world who could benefit.' Well, that unexpected remark started hours of conversation over many many months and, as a result, the National Academy of Sciences is a different organisation today than it was before I came to know Arthur.

Arthur came to about fifteen or so meetings and conferences at our building in Washington. We invited him to everything and he would pick and choose. In those fields in which he was an expert, and there were many, he spoke out with confidence and made a distinct contribution. At other times, he came out of sheer curiosity. Imagine, with all his interests he spent two days at a meeting a few months ago on super-conductivity. It's one of the most exciting fields in modern science and yet Arthur could find the time to come down and just enjoy that entirely new subject. The next day I got a typical telephone call — as Carter referred to them — as I did after every one of the conferences. 'Frank, you have to improve the audio. The speakers should have been coached before they met the reporters. That should have been on a satellite network. I was so excited I couldn't sit still.'

I brought Arthur in to meet Charles Wick, head of the United States Information Agency. Mr Wick walked in and said, 'Dr Sackler, your great works precede you. What can I do for you?' And within fifteen minutes Charles Wick guaranteed four hours of government satellite time with down links in fifty countries for the most advanced American science seminars to be broadcast all over the world.

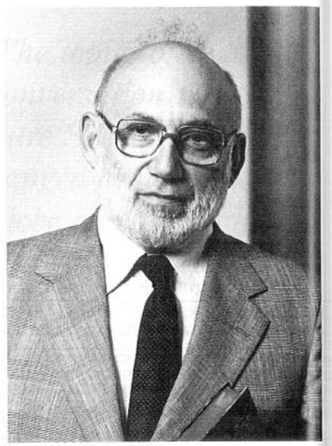
You have heard, and will hear, about Arthur's many contributions in all of the different fields he chose to work in, but if you agree with me that the acceleration of scientific discovery is changing society at an unprecedented rate, then Arthur Sackler's untimely death is an incalculable loss. He was on the verge of becoming one of the great promoters of natural science. Because of his knowledge and enthusiasm for modern methods of communication, he could have accomplished so much, and he was ready to do so. It is rather sad that Arthur died at a time when he was receiving increasing acclaim for his great works. Not that he sought this acclaim, but he certainly deserved it. And I close on the sad note of what might have been because he had all of the energy, the creativity, the inspiration, the enthusiasm, and the real incalculable loss is what he might have done in the next decade.

Dr Joshua Lederberg

President, Rockefeller University, New York

Certainly this is the right place. And we, his friends and admirers, are the right people. But how we do lament the time! We all feel how fate has cheated him of the possibility of enjoyment of many of the fruits of his activities and of the opportunity to move still further in many

I can't think of another individual who has touched so many different fields of culture, of education, science, medicine, and of communication, and did so with very great insight and taste.



fields for which he was just burgeonin with ideas. I know we particularl lament that he could not enjoy the open ing of the gallery in Washington that' scheduled for this fall. But it's not for u to say what the right time is.

In fact, Arthur was a very fortunat man. He was decades ahead of his tim in his medical and scientific approach t the biochemical basis of schizophrenia And he lived just long enough to see th vindication of his approach to that ver important field where he had done pio neering work decades ago. He was abl to see many other fruits from his philan thropies covering an incredible range o interests. I can't think of another individ ual who has touched so many differen fields of culture, of education, science medicine, and of communication, and di so with very great insight and taste. I there was ever a man who knew what h was doing in every one of those fields, i was Arthur M Sackler.

I would like to remark on anothe facet of his life where he will be ver deeply missed. It is how he spoke ou without inhibition, without restraint, i an unrelenting way against the stupidi ties of office, against those small mind who put many obstacles in the path o generating human fruits of technical an medical advance in many ways. And no only about their stupidities, but abou the enormous human cost that was en tailed in the frustrations that would lie i the path of the proper development an dissemination of these advances. I think that this is what I will miss above all Cardinal O'Connor talked about the can dles that Arthur Sackler lit. The ones I will remember are the ones he held under my feet to make sure that I responded with action in support of the moral imperatives we shared, which he articulated so well.

Ambassador Huang Giahua

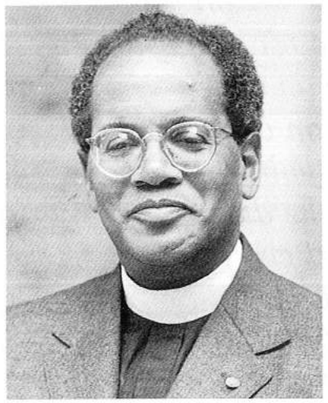
Chargé d'Affaires, People's Republic of China

We were deeply shocked and grieved by the untimely passing away of Dr Arthur Sackler. He visited China at the age of seventy-one and initiated the co-operation of the Sackler Foundation with China, particularly in the fields of health, art and archaeology. He was received by one of the top leaders in China who highly appreciated his generous efforts. Ever since then, a series of co-operative projects have been successfully carried out. I would like especially to mention the establishment of China's *Medical Tribune* which enables China to keep up with the rest of the world's information on medical technologies and equipment. What impresses the most is the great effort made by Dr Sackler in the training of Chinese medical personnel. In addition, the on-going museum project at Beijing University will help people not only understand China's history but also its treasures. And also the friendly feelings of Dr Sackler towards the Chinese people. We, in China, will always remember Dr Sackler's outstanding contribution and we know that he was loved and respected by people from all corners of the globe for the many good things he has done around the world. Mrs Sackler, we share your sorrow and extend to you our deepest sympathy. You have every reason to be proud of Dr Sackler's great achievements. He will always live in our hearts as we continue to work with our American friends to further develop the good relations and co-operation between the Sackler Foundation and China. ●

Our memory of Arthur Sackler will always be that of his presence, his enthusiasm, generosity, warmth and vitality, of the intellectual stimulation of every conversation. These qualities pervaded everything he did, and he did just about everything. Arthur came close to the definition of a universal mind — scientist, clinician, writer, publisher, educator, entrepreneur and business man, artist and collector, visionary and good friend.

HARVARD PAYS TRIBUTE

On Monday 5th October 1987 a memorial service was held at Harvard University, Cambridge Massachusetts in honour of Dr Arthur Sackler. The texts of the speeches presented on tha occasion by Dr Sackler's friends and colleagues are published here for the first time



Harvard University

Reverend Peter J Gomes

Minister, Memorial Church, Harvard University

Today we have come to celebrate the life of Arthur Mitchell Sackler. We have come to celebrate his gifts of mind and spirit, his liberality and generosity, his imagination, and his creativity. We are surrounded on every hand by the signs of his genius, the symbols of his grace to us. Wherever there is art or beauty or music or science, there shall he be remembered. And wherever there are two or three who have taken the benefit of or the pleasure from these great gifts, so too among these shall he be remembered and in whom shall he live.

We have come from many places and many corners of the world to this church today to give testimony of our appreciation of the life of Arthur Sackler. And we are united in companionship with those who cannot be with us but who send their prayers and their greetings and who are with us in spirit. Among these is Teddy Kolleck, the mayor of Jerusalem, who has sent the following telex which I now share with you: 'With sadness Arthur's many Jerusalem friends join in commemorating the memory of a unique person who is greatly missed by all privileged to have known him'.

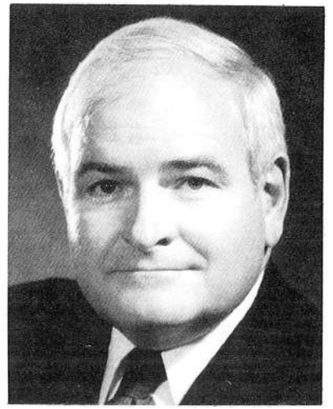
Edgar Peters Bowron

Director, Busch-Reisinger Museum, Fogg Art Museum and Arthur M Sackler Museum, Harvard University

In 1980, in one of his columns in *Medical Tribune,* Arthur Sackler reflected on a recent visit to Florence and Rome he had made with the Fogg Fellows in the company of Sydney Freedberg and Seymour Slive. Characteristically, he expressed the wish that all of his friends could accompany him. 'Wouldn't it be wonderful', he wrote, 'if doctors by the thousands around the world could have gone up Michelangelo's steps to the Biblioteca Laurenziana, built by the Medicis, to pay tribute as I did to Galileo who, with a telescope of his own design, a meter-long tube beautifully covered in leather, confirmed Copernicus, challenged the Church, precipitated what may have served as the prototypical example of interference of a bureaucracy with science, was condemned to house arrest but, nonetheless, helped change the attitudes of men from a solar-centered system to the universe of our galaxies and the infinite reaches of man's intellect.' 'And, on a more earthly plane', he continued: 'how I would have enjoyed sharing the incredible terra-cottas and masterpieces in marble, such visible and viable manifestations of the Renaissance and its Florentine roots.'

When I read that passage six months ago, I was struck that in those two sentences of a mere recalling of a visit to the Laurentian Library taken a number of years before, one could see the essence of this extraordinary man who we gather to remember today — his imagination, his reason, his emotiona response to physical beauty, his icono clasm. 'There are many gifts unique i man', Jacob Bronowski observed, 'but a the centre of them all, the root fron which all knowledge grows, lies the abili ty to draw conclusions from what we se to what we do not see, to move ou minds through space and time and t recognise ourselves in the past on th steps to the present.'

Arthur Sackler possessed these gift in greater abundance than most me which explains not only why he coul respond in such a complex fashion to a architectural design of Michelangelo o to a celebrated scientific instrument, bu also I think provides the clue to hi exceptional and legendary generosity the latest and most brilliant expressior of which is the Arthur M Sackler Galler which opened on the Mall in Washingtor a month ago. It is because he wanted u to draw conclusions from what we see t what we do not see and to move ou minds through space and time that h shared his collections with us and h



provided us with the means to better understand our own.

Arthur Sackler was one of those rare individuals, and I say this as someone who spent his entire adult life working in museums, who truly perceived the intellectual foundations, and I think more than many of us, the possibilities of the art museum both as we presently understand it and as it could be. And that is why he enabled Harvard to build another museum. His first contributions to the University were towards research, and it was his appreciation for what the Fogg stood for as a teaching museum that led him to support our expansion programmes so generously. Arthur conceived of the museum which bears his name not just as a treasure house filled with jades, bronzes, ceramics, calligraphy, paintings and other objects he loved deeply, but equally as a centre for study and learning, a place which could foster ideas, research, publications, exhibitions, and programmes.

And today, in the forthcoming months of this year, which was to be an extraordinary year in Arthur Sackler's life, and in the years to come, we will continue to draw inspiration, both on this campus and throughout the world, from the man who could respond so imaginatively to a visit to a sixteenth-century library in Florence and express so passionately the exhilaration he found in the arts, sciences and humanities.

Paul E Gray

President, Massachusetts Institute of Technology

In February 1986, as a participant in the Festschrift held at the Arthur M Sackler Center for Health Communications at Tufts University, I spoke of how Arthur Sackler's stimulation of research in the sciences and humanities, and his insistent attention to the interface between these ways of knowing the world, had greatly strengthened our research and educational institutions. But to say that he insisted upon the liberation that comes from the many ways of knowing this world does not quite get to the heart of the man or his enterprise.

Arthur's greatest talent was his unselfconscious interweaving of the humanities, the arts and the sciences. His words spoken at the dedication of the Sackler Museum here in 1985 reveal this. 'This is a time', he said, 'when the disciplines of all our sciences are interpenetrating, when the interfaces between the arts, the sciences and the humanities must be enhanced because on such ultimate integrations and relationships may depend the existence of all mankind. Artists and humanists must join with scientists in assuring that the instruments our technologies have forged will be wielded with greater humility and greater humanity.'

In the university, we tend to operate within fairly distinct intellectual categories because we, like all people, need to order and to classify our experience of the world. But those who know the world most profoundly know it because for them these categories do not exist. Arthur Sackler was one of those individuals, rare in the twentieth century. To use an analogy from material science, he located himself at the boundaries of coherent ordered systems, at the areas of misfit, of disorder, where the energy levels are highest, where new structures are built through accommodation and change. In short, at the boundaries where all the action lies.

It was in the exploration of a boundary that Arthur came to MIT just three years ago. We talked about an exhilarating programme for the Institute — the Center for Materials Research in Archaeology and Ethnology under the direction of Professor Heather Lechtman. The Center's graduate research and teaching programmes depend upon literacy in science, in social science, and in the humanities. Crucial to its success has been the facility for students to enter a research problem at any one of a number of hierarchical levels — at the level of the polycrystalline structure of a metal, for example, or at the level of structure of the culturally produced artifact or work of art, or at the level of the individual or the society or the environment managed by the society — and to appreciate the significance of the phenomena at each level through the connections that are developed. Arthur came to appreciate this programme I believe because its style was so much like his own. He was always working at the boundaries — of science, the arts, the humanities — taking his own lead, rather than following the traditional pathways, combining the many ways of knowing the world into a unique vision and philosophy that informed an extraordinary career.

For us at MIT, Arthur's voice and his vision have become part of a never-ending conversation between technology and human needs.

Many of us here have reason to be grateful for his willingness and his insistence on putting together unusual combinations of ideas and people. In doing so, he was a remarkable catalyst. These efforts at accommodation, which embody the imaginative use of misfit, of disorder, and of the high energy which occurs at the boundaries, encourage the growth of nuclei that push away the confining edges of all structures and prior configurations and hold the promise of understanding and improving our world in wholly new ways. For us at MIT, Arthur's voice and his vision have become part of a never-ending conversation between technology and human needs. Human progress, whether it begins in science, technology or the arts, depends on people who see promise where others see confusion, on people who are able to integrate different perspectives and approaches to learning, on people who seek new ways to bridge older intellectual and institutional boundaries. Arthur Sackler seemed to think so, and we believe he was right.

Richard P Traina

President, Clark University, Worcester, Massachusetts

I am a diplomatic historian by training and one who believes very deeply in the efficacy of intercultural understanding as a foundation for durable peace. So you can imagine that I might be attracted to the ideas of Arthur Sackler, that I might be tempted to talk about those particular sets of ideas today. But, instead, I want to take a moment to try to give you an image, a physical symbol to take with you that will represent some of the most important and heartfelt ideas that Arthur had.

The Arthur M Sackler Sciences Center at Clark University is not a triumphant building. It's something more important than that — it's a successful building. It ties together, it bridges, it refaces, it adds substantially to some existing buildings, existing buildings that had been constructed to separate the sciences. Now Arthur did not believe in separation. For him it was not a good idea that faculty or students should see themselves as biologists or chemists or physicists. They should rather become what they needed to become or to collaborate in ways they needed to collaborate in order to meet the challenges presented by science and to explore the opportunities made possible by science.

There is a quotation that I would like to give you from the day of dedication of that building. It's one sentence from his remarks, and I want to say just a few words about the single sentence before I say it. He believed in linkages. He believed in crossing boundaries, as Paul Gray mentioned, and it is important to understand that he believed in openness and in people sharing perspectives. There is a single piece of this sentence I'm going to dwell on first: 'The spaciousness of tolerance'. I think it's a beautiful phrase. The sentence goes: 'Great intellect and genius flourish in the spaciousness of tolerance and in a climate of receptivity' and I think those words are as much a reflection of his life as they are a prescription for our own.

Richard Traina (right) with Jill and Arthur Sackler at the dedication ceremonies for t Arthur M Sackler Sciences Center at Clark University, Massachusetts, March 1985.

Louis Lasagna

Dean, Sackler School of Graduate Biomedical Sciences, Tufts University, Boston, Massachusetts

Arthur Sackler's relationship with Tufts University harks back, strangely enough, to an army court martial on a stifling day in May 1967 in Columbia, South Carolina. On another day many years afterward, Arthur called me to discuss President Jean Mayer, whose orthodox views about nutrition were n exactly in line with Arthur's more fre wheeling beliefs. I suggested that Arthu was selling Mayer short and describe my first meeting with Jean when we ha testified on behalf of Captain Howar Levy at the aforementioned court ma tial. Levy, I might say, had refused f ethical reasons to teach dermatology the so-called 'Green Berets' for what h considered improper political purpose Specifically, I praised President Mayer bravery as a member of the French R sistance during World War II an suggested that Sackler and Mayer wer in many ways spiritual brothers, roma tic idealists and visionaries who did n think it wrong for a man's reach o casionally to exceed his grasp.

The two got on famously and th Sacklers soon became generous friend of Tufts University. Our graduate bi medical school honours all three Sackle brothers, and our handsome Sackle Center for Health Communication named for Arthur, was dedicated in 198 with a glorious degree of intellectua pageantry including a precedent-settin two-way TV hook-up between US scie tists and scientists in the People's R public of China, a country to whic Arthur had such strong ties. Arthu loved that part of the event more tha almost any I think.

Arthur had many dreams for Tuft He wanted us to train physicians i medical reporting and to establis patient data banks for diabetes, fo coronary disease, and for other majo human ailments. He wanted to lin physicians by computers into a pr fessional network that would pool the

Dr Louis Lasagna (centre) with Thomas Murnane (left) and Dr Arthur Sackler.

therapeutic experiences. He wanted Tufts to start, in his words, 'an Institute for Comparative Toxicology' by which he meant an institute that would provide perspective for the public in weighing the risks of medical treatment against the everyday risks of work, of sport, and of environmental hazards. He looked forward fondly to his beloved Jill's tenure on the Tufts' Board of Trustees.

In a very real sense Arthur is not gone. He is with us in so many ways; his ideas fresh and lively as ever, his wisdom, his enthusiasm, and his precepts still there to guide us in the years ahead. In the Sackler Center hang three marvellous paintings commissioned by Arthur because of the messages they convey for young scientists. Robert Gwathmey's *Farmer Sowing Seeds* emphasises the planting of intellectual seeds so vital to learning and to scientific advance. Next to Hans Moller's *Bird* Arthur placed a quotation from the great Russian physiologist I P Pavlov: 'Study, compare, and accumulate facts. No matter how perfect a bird's wing, it could never raise the bird aloft if it were not supported by air. Facts are the air of the scientist.' The third painting is Ben Shahn's representation of the great physician/philosopher Maimonides who holds a book whose pages are open to this admonition: 'Teach thy tongue to say I do not know and thou shalt progress.'

Thomas Hoving

Former Director, Metropolitan Museum of Art, New York

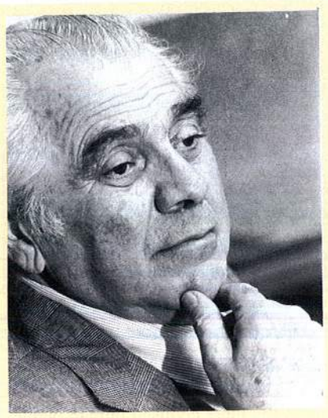
Arthur Sackler was one of the very few true geniuses I ever met in my life and one of the most civilised human beings I ever encountered. I first came across him back in 1967, when I was running the Metropolitan Museum in New York, and I asked somebody 'What's the guy like?' 'He's a troublemaker', I was told, and I said 'Fine, so am I'. It turned out that being a troublemaker meant that he was a forthright person, who spoke exactly what he had on his mind and expected you to do the same, who put his cards on the table, and asked you to do so too.

Well, I had a little bit of trouble at the time. The Metropolitan was trying to win the Temple of Dendur, an Egyptian temple, in a national competition. We were attempting to raise money to build a wing in which to place this Egyptian temple shortly after the Six-Day War, and in the city of New York, this is not very easy as far as fund-raising is concerned. Nothing seemed to work. The pieces were out there in their crates under an inflatable air structure, and I happened to get the feeling that one person would understand that this wasn't a symbol of a country, a political ideology. This was civilisation. We had a meeting, one of those tentative, feeling kind of things. 'What do you want?' he asked looking at his watch. I quoted an enormous amount of money which I said I needed to build a wing for the Temple of Dendur. Silence, and I'm beginning to fall apart. He looked at his watch again and then announced 'I'll do it'. 'You'll do it?' I asked. 'I wanted to wait twenty seconds to say later on that it took you twenty seconds to get all of that out of me', he replied. And it's a brilliant wing, a magnificent thing. And you know what happened, the day of the dedication was the day after the peace initiatives in the east wing of the White House between Egypt and Israel. The day after, and I really wondered maybe he had a hand in that.

Getting to know Arthur Sackler was like peeling an onion, another level, another facet, a deeper level, a deeper layer. It was fascinating. Not long before his untimely passing I happened to have lunch with him, and I was overwhelmed by the enthusiasm with which he talked about his collections and his projects and the people he was working with. He never was interested in a work of art if it didn't have something to do with the learning process, and I never met anybody else like that. Enthusiasm and scholarship, and of course he talked about the new gallery down on the Mall: 'You gotta see it.' I said: 'I have to, of course', and I've seen it. It is gorgeous. There is a sense of joy in it as you enter, and that's very much him. There is that sense of enthusiasm which is of course very much him. There is that feeling of deep scholarship which is deeply him, and there is something else, when you go to it and see it, you will feel it the same way I'm sure. There is something else, and as I left it I said, yes, there is a feeling of reverence. This place is reverent. It's perfect for Arthur Sackler.

Seymour Slive

Founding Director,
Arthur M Sackler Museum,
Harvard University



My very last contact with dear Arthur was last April, a few weeks before he died. Arthur telephoned me on that occasion. Now, telephone calls from Arthur were never a surprise. Arthur's friends knew that he was AT&T's very best customer, but the matter that detonated a call was always unpredictable. It could be about any one of the number of subjects that were close to his heart, or the seemingly infinite number of ideas that raced through his head on the arts, the humanities, the sciences or politics. This call was not an exception.

Out of the blue it seems, Arthur asked 'Seymour, is it still possible to collect fine impressions of Rembrandt etchings?' And he added, 'Oh I know you can't find them the way you go to the supermarket and get a jar of peanut butter, but can they still be found?' And I said, 'Yes Arthur, they can be found if you are prepared to search long and hard and if you are ready to enter today's overheated print market. But why do you ask?' I could see the twinkle in his eye, and Arthur said 'Oh, I'm thinking of perhaps making a collection of all the prints by certain artists dedicated to Old Testament subjects'. I said, 'Hum, is this collection for your next museum?' Arthur replied, 'Possibly'. And long ago I learned that, as far as art collections and museums were concerned, 'possibly' really means categorically, yes!

Arthur was thinking about a new collection for a new museum last April. That is less then five months before his great Gallery opened on the Mall in Washington. Concrete was about to be poured for the foundations of the Arthur M Sackler Museum for Art and Archaeology at Beijing University. It was when working drawings were on the boards in London, thanks to Arthur's generosity, for a complete renovation of the Royal Academy's antiquated Diploma Galleries in Burlington House at Piccadilly. It was shortly after his magnificent gift made possible the Arthur M Sackler Museum at this University, and not long after he initiated the Sackler Wing and other glorious galleries at the Metropolitan Museum. He was thinking about a new collection shortly before he gave to the nation the finest collection made in our time of Ancient Oriental and Near Eastern Art, after he'd made outstanding collections of European terracottas, of Renaissance and Baroque bronzes, of Piranesi drawings and prints, of maiolica, of Pre-Columbian art, of ancient jewellery.

Now what was the museum he had in mind? Arthur had another vision, Arthur had a dream, a beautiful dream, and it was one only Arthur could have conceived. Arthur had a dream of an ecumenical museum dedicated to three of the great world religions: Judaism, Christianity and the Islamic faith. And where was it to be? Arthur would only think of Jerusalem as its home. Arthur spoke of that museum often, even while we were working out plans for the Sackler Museum here at Harvard. And his discussion of Old Testament subjects in April indicated that the idea was with him to the very end.

Now why an ecumenical museum? Why all of these museums? Why these pavilions dedicated to art? The answer is crystal clear. Arthur had a faith. Arthur had an unshakeable faith that the arts can contribute to worldwide understanding and esteem between men and women. It was a faith, and he felt that without this mutual understanding, we would have mutual nuclear destruction. He wanted peace, understanding. This was his deepest dream, his greatest hope for humankind. He felt that art contributed to understanding as well as aesthetic delight, and he was right. If you know how to read a work of art, it can tell you about what men and women of various epochs and cultures thought, what they thought of themselves, their fellow human beings, the things they lived with, their ideas of nature, their relation to their fellow man and their hopes, their dreams, the forces they chose to call divine. It was this faith that propelled Arthur to make the gift of the Sackler Museum at Harvard. This was the impulse that generated his worldwide benefactions to the sciences as well as the arts and the humanities, because he felt that all of these disciplines are not competing but complementary approaches to understanding and enlightenment. There was a faith. Arthur, if someplace somewhere you are listening, and I can not help believing you are, know that your faith is contagious, and the humanists and the artists and the scientists you've touched will do all they can to implement and further it.

Derek Bok

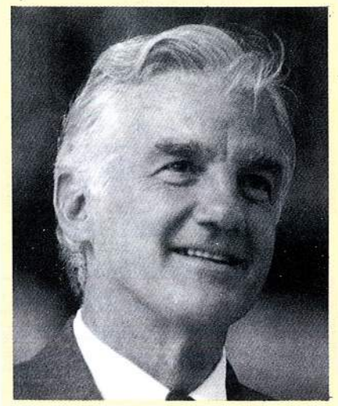
President, Harvard University

I first saw Arthur Sackler in 1980 at the prompting of Seymour Slive who hoped that Arthur might help to build the new museum that the university needed so badly. We met, I recall, in New York City and talked for a long time about art, about medicine, about universities and about many things. It was then that I first heard about his unhappy experiences at Columbia University when he agreed to fund the university museum only to see his plans go up in smoke in the student conflagrations that swept across Morningside Heights in the spring of 1968. In contemplating a new museum for Harvard, neither of us could foresee that we too would encounter problems, problems that would come perilously close to bringing our plans, like those at Columbia, to a premature, unhappy end.

Thanks to Seymour's powers of persuasion and Arthur's generosity, arrangements were soon made to proceed with the museum. As word leaked out, much as in the case of Mr Hoving, whispers of caution became faintly audible. From that rumour-infested world of art museums, the warnings reached our ears that our donor might prove to be a difficult, demanding, troublemaking patron. Nevertheless, we pushed on, aware as we were that we had a faculty huddled in overcrowded offices, with paintings stuffed onto racks, and ill-lit, dimly ventilated basements where handlers and conservators were stuffed into cramped, inadequate quarters. But, as we persevered, never did it occur to us that Harvard and not our donor might eventually emerge as the troublemaking party.

And so it came to pass. Over the next two years, architects stubbornly stood their ground, contractors raised their prices, Harvard presidents hurled unexpected thunderbolts, and museum professionals protested noisily. Only Arthur remained serene, unprovoked, steadfastly loyal to the project. Had our fortunes depended on a less patient, less forgiving donor, there would surely be no museum now to house our faculty and display so grandly our collections of Islamic, Chinese, Asian and Classical art. It is an enduring sense of satisfaction to me, and always will be, that his patience and good humour were rewarded at the end and that he lived long enough to preside over the joyous celebrations that marked the completion of the Arthur M Sackler Museum.

I've sometimes wondered why Arthur was so patient with such a fractious institution. I suspect that it is because he felt such respect for universities, not for their administrations or their day-to-day decisions, but their aspirations, their ultimate ideals. For Arthur believed in the power of ideas, of learning, of new discovery. Of course he was also aware of the dangers that knowledge created for the world. Even so, he respected thought and creativity more than anything else, regarding them as the qualities that distinguished humankind at its best. If they had produced the discoveries that put us all in peril, so also would they be the source of our salvation, and so he concluded, as others have pointed out today, 'I have acted on the conviction that the arts, sciences and humanities are the three bridges that transcend racial, ethnic, religious and national differences, and are paths to peace, to mutual respect and esteem, to the elimination of intolerance and prejudice as causes of conflict.'



Harvard University

In honouring the memory of a man who honoured us, it is fitting to recall what he exemplified at his best, for much of his life reflected the fruits of what we strive for every day in our colleges and universities. To illustrate the point, I wanted briefly to mention four of the most difficult challenges for a liberal education and describe how Arthur Sackler met each one of them.

The first challenge is how to bridge the gap between the humanities and the sciences. Almost thirty years have passed since C P Snow first came to this campus to give his controversial account of the two cultures. Since then the need to increase understanding between the humanities and the sciences has steadily increased. And yet the gulf that divides those two great intellectual domains has continued to widen, as science grows ever more specialised and as the scientific literacy of our population gradually declines. Arthur was one of the small minority undaunted by the barrier separating the arts from the sciences. To him they were opposite sides of a single coin. As he put it, 'Science is a discipline pursued with passion, and art a passion pursued with discipline.' To educators who struggle to bring unwilling souls to comprehend the bare minimum of both intellectual spheres, it must be inspiring to behold a man who majored in literature and art history and minored in biology, a man who taught himself to be a recognised connoisseur of art while managing to publish more than one hundred and forty scientific papers.

Our second challenge is to teach our students to be genuinely cosmopolitan, forever aware of cultural diversity and ever sensitive to differences in laws and customs and forms of social organisation. Developing these attitudes is a particularly formidable challenge in a country where only a minority of college graduates have travelled abroad before the age of twenty-five or have bothered to learn a foreign language. In his reading habits, his business interests, his constant travel, his global passion for art, Arthur was nothing if not cosmopolitan. It was perhaps in art that he showed most clearly his curiosity for other cultures. In gathering objects, he was more than just a collector. Collections were his way of understanding other civilisations, and he came to know a great many of them. If he acquired on a vast scale, it was partly because he realised how much evidence one needed to comprehend anything as complicated as a civilisation.

The third great challenge of a liberal education is to convey to students both the ability and the desire to keep on learning throughout their lifetimes. Like the other challenges I have mentioned, this task has also grown more urgent with the passage of time. As Sir Eric Ashby once observed, 'We are living now in the first century in which our children will grow old in a civilisation that would be incomprehensible to our

parents.' Coping with this challenge is far from easy. We do the best we can for our students in our new curriculum by giving all of them the basic skills and methods of thought required to apprehend the principal varieties of human thought and experience. But even as we try, many of us wonder now and then whether the effort can possibly succeed amid such a flood of new information and the relentless pace of change. Arthur Sackler is one of those human beings who helps keep our faith alive by showing that it still is possible for someone of sufficient curiosity to keep on learning, acquiring new interests, exploring new problems even in the later stages of life. The many themes that were sounded at the celebrations opening the Sackler Museum — art, music, biology, philosophy, psychology, international understanding — all of them testify to a life marked by constant curiosity and exploration.

The fourth and final challenge of a modern education is to develop in students a real concern for others and a sense of satisfaction in helping those less fortunate then oneself. Here too Arthur Sackler was exemplary. His remarkable generosity has been noted many, many times. He once declared that his instinct for benefaction came from his family, recalling that when he was only four years old, he could remember his parents selling their jewellery to help establish a Jewish nation in Israel. Whatever the source, many institutions, and through them countless people, have been enriched and enhanced by his benefactions.

'I've only reached a small fraction of what I hope to achieve with my life', said Arthur Sackler, not long before he died. Small fraction it may have been, for his ambitions were very large indeed. Yet the breadth of his interests, his appetite for experience, his insatiable desire to know more about everything will remain for all of us to remember. Those of us who spend our lives trying to give a broad liberal education to others should recall how hard he worked to fulfil many of the goals we seek for those who study here. Not just as a benefactor will we remember him, but as a liberally educated person in the very best sense of that term.

Jill Sackler

It is fitting to hold this service in Memorial Church. Arthur was proud to be Jewish, but he worked with Catholics and Communists, Buddhists and atheists, assisting in ecumenical projects in an endeavour to build bridges between peoples. Cardinal Caseroli, Secretary of State of the Vatican, told Arthur, 'You say you are not religious, that you follow no rituals, believe no dogma. Yet you are a religious man'.

It was twenty years ago this year that I met my dearest Arthur, and the time went too fast. I cannot realise that he has gone forever. That life force, so vital, so passionate in every way, so highly principled, so innovative and creative, so optimistic, enthusiastic, dynamic, joyful, courageous, compassionate, so eager to help others. He seemed indestructible. I was confident he would see the turn of the millennium as he hoped. His dedicatory address for the Arthur M Sackler Museum here was entitled 'A New Millennium Begins'. It concluded, 'It is clear that bridges must be built to unite peoples in mutual respect, in reciprocal esteem, in a shared striving for great common goals. I believe that the arts, sciences and humanities can best create those bridges of understanding essential for a world in which all people can link their aspirations to achieve their potentials and the abundances now possible to assure for all the blessings of peace. Towards these ends I have dedicated a lifetime and now dedicate this institution'.

And he had dedicated his lifetime. It is impossible for me to find words to do him justice. He excelled at everything to which he put his magnificent mind. Bor with great gifts, he augmented them b constant study, search, scholarship. H was the opposite of lazy. I could admir everything about him.

Arthur felt his fundamental role wa as a doctor. He decided his vocation wa medicine at the age of four, no doul inspired by his beloved mother, reputec ly a leader of her community. Throug his medical communications network, h extended and improved the lives of man millions. He used to say he was proudes of his scientific research into the meta bolic basis of schizophrenia and though this was his most important contributior He was honoured last year by th National Academy of Sciences. How ever, it is as an art collector that he i best known. When I first saw him in museum, which was very soon after met him, I observed the joy he got fror the objects and I understood with what gift he had been born. Nothing gave hir greater pleasure than roaming the ar galleries, and picking out pieces other had overlooked — of course he made hi own choices. His first purchase was of a American painting, at auction, when h was a student, long before art was status symbol or a good investment. H didn't want to make a profit from art - he never sold a single piece.

Arthur was a skilful businessman, bu he had no respect for money as such ar was always trying to catch up with h own generosity. At heart he was a academic, a philosopher, a perpetu student with the highest respect for th great institutions like Harvard, Tufts Clark, Princeton, New York and Rock feller Universities, MIT, the Nation Academy of Sciences, the National Ga lery, the Smithsonian.

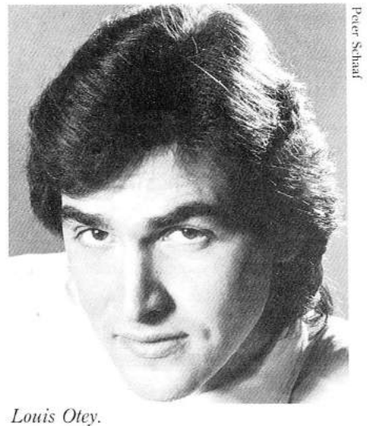
Today I deeply thank President Bol who immediately offered to hold th Memorial Service at Harvard, and all th other speakers who have paid tribute t Arthur. We are honoured by some wor derful musicians, who are also tru friends, who have come to honou Arthur: Roberta Peters, Carlo Bergonz and Louis Otey. Arthur would have s loved to hear you, and the Stamfor Chamber Orchestra Octet, also person friends. Music meant a great deal in ou lives. He loved concerts, opera and liv

ICM Artists

Roberta Peters.

Erika Davidson

Carlo Bergonzi.



Peter Schaaf

Louis Otey.

theatre. He delighted in the circus — the magicians, jugglers, puppets, acrobats, clowns. He loved to laugh and to have fun.

Aside from his accomplishments, Arthur had an attribute which I think is probably more rare than his other talents. He was a truly good person, a fine, splendid, noble human being with absolute integrity. He never had a small, petty, or devious thought. He was not jealous of others' achievements. He was so competent and capable, he had no insecurities. With all his brilliance, he had an innocent, naive, trusting quality. He always expected his well-meaning sentiments to be reciprocated and was hurt when they were not. The sweetness of his soul was extraordinary, especially in a great achiever. He simply wanted the best for others. Hardly anyone crossed his path without his enhancing their lives. I have received letters from people who hardly knew Arthur, even meeting him only once, who said he gave them ideas which led them to change their lives for the better. If he had that effect on strangers, how much more on the people close to him.

Of course, he especially did his best for his family, and it was not an easy road. When he was fourteen, his parents lost their money in the Depression and he went to work, supporting them and putting himself and his two younger brothers through school and medical school and financing and nurturing all the family businesses. He always worked so hard right to the end. Now I know it was too hard. He was devoted to his children, Carol, Liz, Arthur and Denise, and his grandchildren. He and his first wife Else maintained a beautiful friendship for over fifty years. He admired his second wife, Marietta. And he was everything to me. He used to say that we were a team which I took for granted, but now I realise it was a privilege.

The Stamford Chamber Orchestra conducted by Laurence Gilgore.

I hope my dearest husband is looking down, keeping in touch with what we are doing, perhaps even guiding us. We all need him, particularly me. This service is to celebrate Arthur's life. There certainly is much to celebrate, but there was so much that he planned to do. Few people could be said to be in the prime of their lives at seventy-three, but Arthur was. Although any death is untimely, I cannot imagine anyone with more to look forward to in the next few years. At last I thought he was about to reap some satisfaction from his labours, to enjoy, to quietly think. He needed more years to consolidate his legacy and finish his work, especially in his diplomatic efforts towards peace. But I believe he is already in the pantheon. Although he scorned publicity and hype, I think his greatness and the fine way that he lived his life will eventually be recognised. It is a horrendous loss to me and those close to him, but it is also a loss for humankind. Arthur was a force for good, and with virtually every thought and deed he attempted to improve the world. I think he succeeded. ●

THE ARTHUR M SACKLER COLLECTIONS

Dr Arthur Sackler was one of the world's great art collectors and connoisseurs. The objects an paintings in his collections span thousands of years from ancient times to the present. His majo focus was Oriental art, although items from many other parts of the world are also represented Lois Katz, the curator of the Arthur M Sackler collections, describes in detail the range of thes magnificent collections. The few important items illustrated, some of which were among hi most treasured and cherished possessions, demonstrate Dr Sackler's impeccable taste, th incomparable breadth of his unique vision and the profound sensitivity of his collector's eye

At a dinner in honour of Dr and Mrs Sackler, held at the California Palace of the Legion of Honor in San Francisco, Ian White, the former director of the Fine Arts Museums of San Francisco, commented on Dr Sackler's reaction on seeing the exhibition of his Italian maiolica collection there. 'It was one of wonder, surprise and pleasure, as if he were seeing the objects for the first time and thus reaffirming his initial impulse to collect them'. The reaction Ian White noted as Dr Sackler walked through the exhibition was, in fact, Arthur Sackler's response to art, whether it was part of his own collection or not: wonder, surprise and pleasure.

Always intrigued by the mysteries, wonders and challenges of life, Arthur Sackler has been characterised by many who knew him as tireless, enquiring, compassionate and vital, as an optimist and a fighter. The range of his interests and restless intellectual curiosity was manifested not only by his involvements in the fields of science and the humanities, but also in the scope and quality of his art collections. These collections include objects and paintings from various parts of the world and all periods from ancient times to the present. His major focus, however, was Oriental art, ranging from the ancient Near East to the Far East and spanning thousands of years. The major thrust was Chinese art.

In addition to being one of the world's great art collectors and connoisseurs, Arthur Sackler was a major benefactor of museums, universities and other institutions in the arts, sciences and the humanities. He established the Arthur M Sackler Foundations to support research on and publications of works of art and to enable small and large museums alike to exhibit, without charge, art objects from the Sackler collections, a range and scope of material not easily available otherwise.

Collecting art began for Arthur Sackler in his student days, even before he studied medicine. As he explained in the pages of *Medical Tribune,* as a young man he went to art school in the evenings to develop his artistic talents, but when he recognised his own limitations as a creative practising artist he began instead to collect. At first he collected American art, then Pre-Columbian art, Renaissance and pre-Renaissance art, French paintings and then 'one wonderful day in 1950 [he] came upon some Chinese ceramics and [Chinese] Min furniture'. His life was never the sam thereafter.

Dr Sackler was fascinated by th highly developed civilisation of ancie China which produced utilitarian and ri ual objects of consummate beauty an craftsmanship. He found equally fasc nating the philosophy and the writings Chinese scholars and the customs an rituals which dictated the production ceremonial bronze vessels, tomb furnish ings of all sorts, and figurines of clay. A he warmed to Chinese aesthetics he e panded his collection of Chinese object to include not only ceramics but all type of Chinese art: bronze vessels, archa jades, metalwork such as mirrors, bel hooks and weapons, Ming and Qin paintings, lacquerware, stone and woo sculpture, and more Ming and Qing fu niture (Figure 1).

One of his most treasured possession difficult to put into any neat category, the marble owl vessel on the inside bac cover of this issue. I remember bringin the object to New York after it wa purchased and admiring it with D Sackler. It was a bold purchase since th marble owl vessel is still one of a kin Although early Chinese marbles of th

Figure 1. Lower section of a clothes cupboard (chao yi gui). *Painted gold lacquer* (miaojin) *on wood. China. Ming dynasty, circa 1600 AD. Height 220 cm, width 184.7 cm, depth 74 cm. Accession no. 65.1.110.*

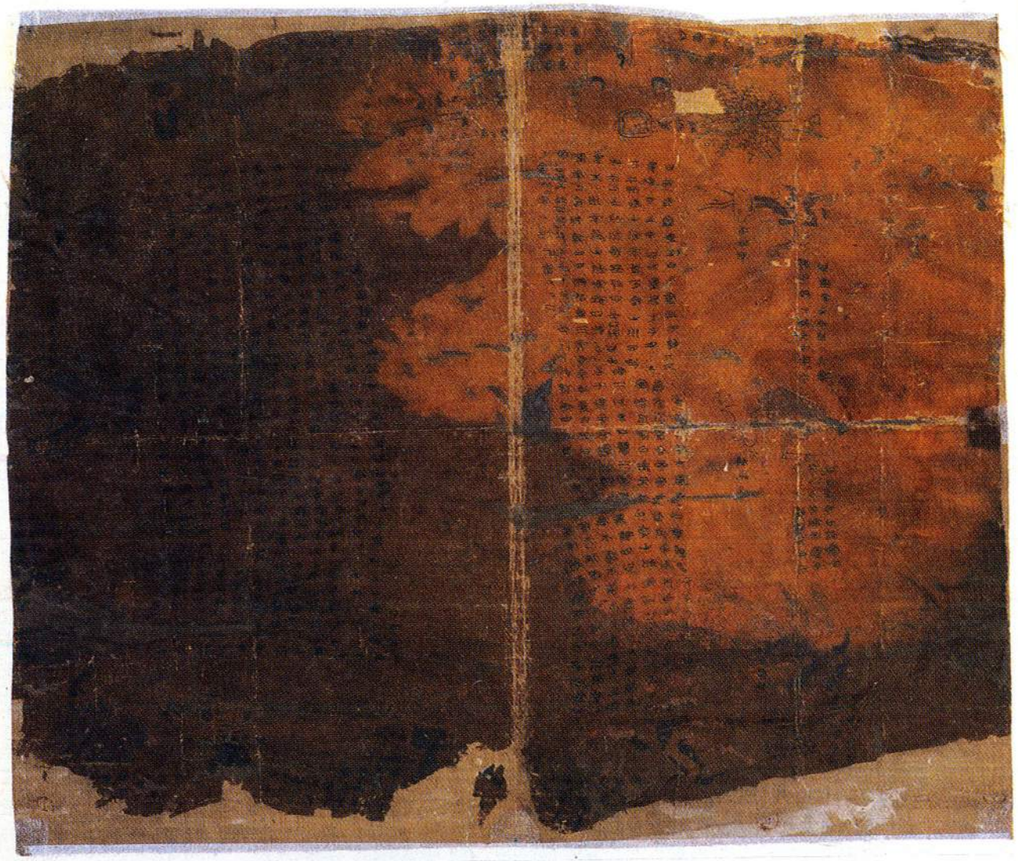


Figure 2. Chu silk manuscript. Page from a magico-religious document. Silk. Painted with ink and colour. China. Eastern Zho dynasty. State of Chu, 5th or 4th century BC. Height 38.7 cm, width 47 cm. Accession no. 63.1.1.

Shang (circa 1600 to 1027 BC) and Zhou (1027 to 221 BC) periods are known, no other Zhou-period marble vessel of this type has yet been found. But Arthur Sackler was not afraid to acquire an object in which he believed, even if nothing immediately comparable was known to support its authenticity. Dr Sackler was alerted to the availability and importance of this owl by his friend, the great collector and connoisseur of Chinese art, Dr Paul Singer. When Professor Max Loehr (Professor Emeritus at Harvard University) saw the marble owl several years later he congratulated Dr Sackler for acquiring it, claiming it was one of the greatest objects in the Sackler collections.

Another bold purchase was the Chu silk manuscript (Figure 2), the earliest known Chinese painted manuscript so far. It is a page from a magico-religious document from the Zhou-period State of Chu, written and painted on silk about the fifth or fourth century BC. Subsequent to its purchase by Dr Sackler it became the focus and subject of a number of scholarly articles and a two-volume treatise by Dr Noel Barnard, Department of Far Eastern History, the National University of Australia. Although the manuscript was offered to many museum curators before its purchase by Dr Sackler, they were reluctant to purchase it because of its uniqueness which reflected on its authenticity. Dr Sackler was fascinated by the implications of this painted manuscript page and sponsored a symposium to discuss it and relate it to a broader spectrum of Pacific art. A three-volume publication *Early Chinese Art and Its Possible Influence in the Pacific Basin* (1967) was the result of that symposium. Scholars from many disciplines relating to cultures of the Pacific rim presented papers on the art of various peoples which might be considered comparable to the images on the Chu silk manuscript. I remember John Pope, former director of the Freer Gallery, Washington DC, telling me how sorry he was that he had not purchased the manuscript when it was offered to the Freer. He thought Dr Sackler was extraordinary in his perception of its importance and in daring to buy it.

When Dr Sackler went to China for the first time in 1976 with a group of American doctors and other professionals he expected to be an anonymous member of a group. This was not to be the case, however, as I assured him he wouldn't be, since his collection was well known to the Chinese and the Chu silk manuscript was particularly important to them. Dr Sackler was amused when he related to me the discreet comments and questions to him while he was touring China. Many of his Chinese guides asked him whether he knew the American collector who owned the Chu silk manuscript. Dr Sackler replied 'he thought he

Figure 3. Ritual wine storage vessel, type fang-yi. *Bronze. China. Shang dynasty, Anyang period, 13th century BC. Height 25.4 cm. Accession no. 74.268.2. Gift of Dr Arthur M Sackler, the Metropolitan Museum of Art, New York.*

Figure 4. Ritual vessel, type lei. *Bronze. China. Shang dynasty, pre-Anyang period, circa 15th century BC. Height 27.7 cm. Accession no. V-59.*

knew him'. Although the Chu silk manuscript will be seen on exhibition at the Arthur M Sackler Gallery, Washington DC, Dr Sackler felt it should eventually be returned to the People's Republic of China.

Over four hundred objects constitute Dr Sackler's collection of Chinese bronze vessels which spans the Shang (circa 1600 to 1027 BC) through to the Han periods (206 BC to AD 220). Those attributed to the Shang dynasty are the subject of one volume, *Shang Ritual Bronzes,* written by Dr Robert W Bagley of the Department of Art and Archaeology, Princeton University, and published in April 1987, just a month before Dr Sackler's death. Eleven years in preparation, it is a masterpiece of scholarship on Dr Bagley's part and a testimonial to the depth of Arthur Sackler's serious interest in, and love for, Chinese art. Two more volumes on Chinese bronze vessels are scheduled for publication: *Western Zhou Ritual Bronzes* by Jessica Rawson, Acting Keeper, Department of Oriental Antiquities, British Museum; and *Eastern Zhou Ritual Bronzes* by Dr Jenny F So, Consultant in Far Eastern Art, who collaborated with Dr Bagley on the exhibition *The Great Bronze Age of China* at the Metropolitan Museum of Art, New York, in 1980.

From the Chinese bronze collection one hundred and fifty-four vessels were chosen as a gift to the nation, to be housed at the Arthur M Sackler Gallery, the Smithsonian Institution, Washington DC, which opened in September 1987. Fifteen bronzes were given as a gift to the Israel Museum, Jerusalem. A number of vessels from the collection now belong to Columbia University, New York; and many were purchased from the Chester and Dolly Carter Collection and given as a gift to the Art Museum, Princeton University. One of the most magnificent bronzes in Dr Sackler's collection, a *fang yi* formerly in the Frederick Mayer Collection, New York, was given as a gift in 1975 to the Metropolitan Museum of Art (Figure 3).

Among Dr Sackler's many favourite bronzes are the fifteenth-century-BC *lei* (Figure 4); the *you,* dated to the thirteenth century BC, formerly in the Rothschild Collection, Paris (Figure 5); the eleventh or twelfth-century-BC owl-shaped *zun* (Figure 6) and the rhinoceros-shaped *zun* of the eleventh or tenth century BC (Figure 7) which stood for many years in his home as cherished objects with which he chose to live; the late-eleventh or early-tenth-century-BC *gui* (Figure 8); the *hu* of the thirteenth century BC (Figure 9); and the large eighth-century-BC *fang hu,* the mate to which is in the Musée Guimet, Paris (Figure 10). All the bronzes in Figures 4 to 10 are now at the Arthur M Sackler Gallery, Washington DC.

Figure 5 (top). Ritual vessel, type you. *Bronze. China. Shang dynasty, Anyang period, 13th century BC. Height with handle 30.1 cm. Accession no. V-316. Figure 6 (above). Owl-shaped* zun. *Bronze. China. Shang dynasty, Anyang period, 12th to 11th centuries BC. Height 16.3 cm. Accession no. V-13.*

Among the wonders of the Sackler collections are the ancient Chinese jades. Four hundred and seventy-four of these were selected as a gift to the nation, and now can be seen in Washington DC. As jade was cherished by the Chinese for millennia, so it was cherished by Arthur Sackler. His feeling for the jades he collected, however, had little to do with the stone's symbolic significance for the Chinese. His appreciation was for the aesthetics, the superb carving and ornamentation of the small but monumental objects he acquired. The collection of more than fifteen hundred carvings is comparable in quality and extent to the Chinese jade collection in the British Museum and to the jades in the Winthrop Collection now housed at the Arthur M Sackler Museum at Harvard University. Jades from the Christine Holmes Collection, the Nai Chi Chang Collection and the Dietrich Addis Collection provided the early framework for the Sackler jade collection. When Dr Sackler acquired art from large private collections destined to be sold or dispersed, he often tried to keep those collections intact; he considered a good collection a work of art in itself. This was particularly true of those jade carvings that came from the Desmond Gure Collection, England. The jades Arthur Sackler cherished were many; the few illustrated here demonstrate his sense of the superb (Figures 11 to 15).

Ceramics were a major interest of Dr Sackler's for over forty years. His taste ran to boldly formed and painted wares, usually manifesting an early expresssion of a culture's ceramic aesthetic. In the last fourteen years the Sackler Foundations have prepared and mounted many exhibitions of ceramics in the collections of Dr and Mrs Sackler. These include: *Art of the Andes, Pre-Columbian Sculpted and Painted Ceramics of Peru* (Figures 16, 17, 18 and 19); *Art of Costa Rica, Pre-Columbian Painted and Sculpted Ceramics* (Figures 20, 21 and 22); *Italian Maiolica, Tin-glazed Earthenware from the Fifteenth to the Eighteenth Centuries* (Figures 23, 24 and 25); *Ancient Near Eastern Ceramics* (Figures 26 and 27); and *Selections of Chinese Ceramics, Neolithic through Yüan,* an exhibition recently mounted at the Israel Museum, Jerusalem, to which Dr Sackler was particularly devoted.

Dr Sackler was intrigued by the discrepancy in time in the development of ceramic technology between the West and China. In the West, sophisticated high-fired glazed stoneware was not made until the eighteenth century; in China, on the other hand, the technique was practised as early as the second millennium BC. How and why the Chinese achieved such a high level in their

Continued on page 54

Figure 7 (above). Rhinoceros-shaped zun. *Ritual wine container in animal form. Bronze. China. Western Zhou dynasty, 11th to 10th centuries BC. Height 30.2 cm, length from nose to tail 46.4 cm. Accession no. V-32.*

Figure 8 (right). Ritual food container with lid, type gui. *Bronze. China. Western Zhou dynasty, 11th to 10th centuries BC. Height 34.6, width with handle 30.6 cm. Accession no. V-185.*

Figure 9 (far right). Ritual wine container, type hu. *Bronze. China. Shang dynasty, Anyang period, 13th century BC. Height 34.8 cm, maximum width 24.2 cm. Accession no. V-33.*

Figure 10. Ritual bronze wine container, type fang hu. *China. Late Western Zhou or early Eastern Zhou dynasty. Early 8th century BC. Height 74.9 cm, maximum width 43 cm. Accession no. V-80.*

Figure 11. Plaque with tao tie mask and hanging blade design. Jade. China. Shang dynasty, Anyang period, 13th to 12th centuries BC. Height 11.3 cm. Accession no. 72.1.38.

Figure 12. Bear. Jade. China. Han dynasty. Height 4.9 cm, length 9.6 cm, width 50 cm. Ex Desmond Gure Collection, England. Accession no. J-1410.

Figure 13. Winged chimera with rider. Jade. China. Han dynasty. Height 8.1 cm, length 13.9 cm. Ex Desmond Gure Collection, England. Accession no. J-1408.

Figure 14. Hound. Jade. Chin
Tang dynasty. Height 3.9 cm, lengt
8.4 cm, width 2.5 cm. Ex Desmon
Gure Collection, Englan
Accession no. J-144

Figure 15. Goose. Jade. China. S
dynasty (AD 960 to 1644). Hei
2.8 cm, length 9.2 cm, width 6
Ex Desmond Gure Collecti
England. Accession no. J-13

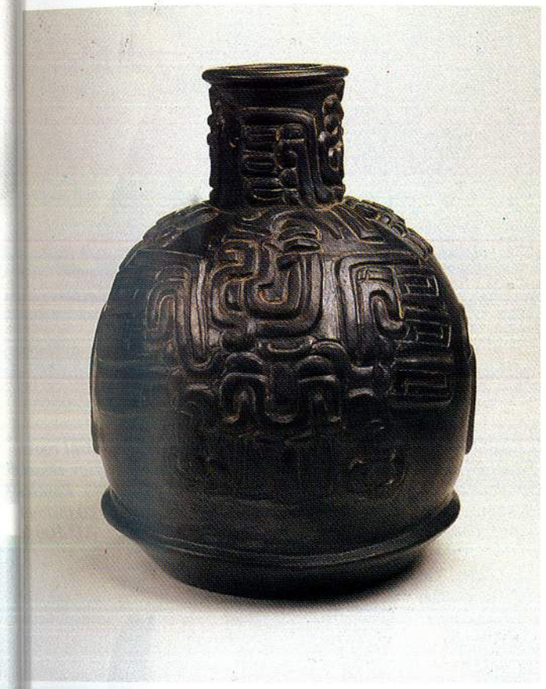


Figure 16. Bottle with spread-winged rapacious birds. Earthenware, burnished blackware. Peru, north coast, Cupis nique. Late Chavin period, late first millennium BC. Height 24.1 cm, diameter 18.3 cm. Accession no. 82.6.5.

Figure 17. Effigy bottle in the form of a dignitary. Earthenware, polychromed and burnished. Peru, south coast. Coastal Huari, Atarco style, AD 600 to 700. Height 41.2 cm, diameter 27.9 cm. Accession no. 83.1.1.

Figure 18 (above left). Effigy jar with whistle, man and monkeys. Earthenware, slip painted in white and brown. Peru, central coa Chancay. AD 1000 to 1470. Height 25.4 cm, width 15.2 cm. Accession no. 82.6.24. Figure 19 (above right). Monkey effigy vess Earthenware, tan body under red slip with cream paint. Costa Rica, Guanacoste-Nicoya zone. Period IV (1000 BC to AD 500). Rosa zoned engraved ware (300 BC to AD 300). Height 23.5 cm, length 26.4 cm, width 15.2 cm. Accession no. N-1109. Figure 20 (belo Vessel in the form of an antlered deer. Earthenware, slipped and burnished. Peru, north coast. Moche culture, style III. Circa AD 100 200. Height 24.1 cm, width 29.2 cm. Accession no. 82.5.3.

Figure 21. Tripod bowl with appliqué on legs. Earthenware, brown clay body under a red slip. Costa Rica, Atlantic Watershed/ Central Highlands zone. Period V (AD 500 to 1000). La Selva A or Curridabat A phase, Africa tripod group, AD 400 to 700. Height 33.3 cm, width 17.5 cm. Accession no. N-1176.

Figure 22. Armadillo effigy vessel. Earthenware, buff clay, slipped, burnished and painted. Costa Rica, Guanacoste-Nicoya zone. Pe V/VI (AD 500 to 1500). Mora polychrome/Mora variety (AD 800 to 1200). Height 19.1 cm, length 45.7 cm, width 19.7 cm. Acces no. N-1155.

Continued from page 45

ceramic tradition at such an early date and continued to produce high-quality ceramics with inventiveness and vigour over three thousand years — even to the extent that the word 'China' became synonymous with ceramics itself — fascinated Dr Sackler.

The Sackler collection of Chinese ceramics comprises vessels of all types and ***mingqi,*** the goods provided for the deceased for the spirit's journey after death and a measure of the filial piety of the deceased's descendants. Included are many sculpted, painted and glazed ceramics ranging in date from the Neolithic cultures of the third millennium BC through to the Yüan dynasty (AD 1281 to 1368) and a few from the Ming dynasty (AD 1368 to 1644). They exhibit various types of decoration: boldly painted black and purple-red Neolithic pots of the Banshan Culture Phase; Zhou-period stonewares with impressed designs; figurines painted with unfired cold pigments or covered with straw-colour or mottled three-colour lead glazes; the suffused ware of the Tang dynasty (AD 618 to 906) Huangdao kilns; white wares; celadon wares from Yue and other southern kilns as well as from northern kilns; *jun*-type celadon wares of opalescent tones; black and brown wares; and Cizhou wares boldly painted with iron-brown pigment on a white kaolin slip (see Figures 28 to 33 and back cover).

Dr Sackler's collection of Chinese ceramics presents the brilliant tradition which led to the development of the delicate, resonant and translucent porcelains so long treasured in the West. The blue and white and enamelled porcelains, however, are not represented in the collection because Dr Sackler's taste was for the earlier, formative wares. What fascinated Dr Sackler was the juxtaposition of similar objects from different cultures — as, for instance, a ram's head from a Chinese Han dynasty tomb and a bronze ram's head created by Picasso, both in his collections (illustrated on page 110).

Among his Chinese art collections were Chinese paintings which have been exhibited extensively in the United States, Canada, Dublin, Edinburgh, and Jerusalem. Many of the paintings w bought with the intention of giving th as gifts to the Metropolitan Museum Art and the Art Museum, Princeton U versity. Those which he kept privat have finally been given to the Arthur Sackler Gallery, Washington DC. *Stud in Connoisseurship,* written by Mari and Shen Fu, was the catalogue t accompanied the exhibition. The ca logue itself has been described as monumental work, and is a must for students of Chinese art (see Figures and 35).

A full discussion of the Chinese ar Dr Sackler's collections would requ many volumes, volumes which are c rently in preparation. But such disc sion still would not present the range his vision, the profound sensitivity of collector's 'eye', and his broad appr ation of art. These qualities are furt demonstrated in other acquisitions, instance, Sassanian-period silver (224 to 647) from ancient Iran or ancient Near East, of which he was p ticularly fond (Figure 36); or ivories the earlier ancient Near Eastern Ach

minid period (550 to 331 BC) (Figures 37 and 38).

The silver bull rhyton illustrated elsewhere in this issue (page 76) was bought with his eldest daughter Carol, now a physician herself and the mother of three of his grandchildren. As was his practice in quieter days when he was in New York, Dr Sackler spent Saturdays visiting art dealers. One Saturday Carol was with him and he suggested that she select the object she liked best from among those they had seen together that day. Carol selected the Sassanian silver bull rhyton, which was Dr Sackler's choice as well, and he purchased it. Thereafter it was dubbed 'Carol's rhyton'. Dr Sackler took particular pleasure in remembering and recounting to me his excitement when he found the rhyton, and his enhanced enjoyment on learning that his daughter shared his appreciation.

Ancient Near Eastern art always appealed to Arthur Sackler but undoubtedly he was stimulated to acquire it through his association with Dr Edith Porada, Professor Emerita at Columbia University. With her encouragement he also acquired a large number of ancient Near Eastern cylinder seals. For many years these cylinder seals, approximately one thousand, have been at Columbia University, where they are being studied by Professor Porada.

In addition, Dr Sackler acquired ancient Iranian ceramics, stimulated, as so many other collectors were, by the beguiling Amlash animal vessels which began to appear on the art market in the 1960s. Such vessels came from megalithic tombs in the region of Amlash in the mountains southwest of the Caspian Sea. The Amlash ceramics in his collection, together with the cylinder seals, other ancient Near Eastern ceramic vessels, bronze weapons, horse trappings and various bronze accessories which Dr Sackler acquired over the years, demonstrate his appreciation for, and understanding of, archaeological artifacts. Some of these objects have been given to the Arthur M Sackler Gallery. The ceramic rhytons, modelled in the form of animals or animal heads and characterised by bold, striking profiles and the simple juxtaposition of geometric forms, had a strong appeal for Dr Sackler. He also acquired other early Iranian ceramic vessels of equally wonderful ceramic shapes and craftsmanship. The ceramics which still remain in his private collection, or are part of the collection given to Columbia University, were exhibited for the first time in October 1987.

All collectors remember the 'ones that got away' and so did Dr Sackler, but he never really looked back. So many objects and paintings fascinated him, so many new fields demanded exploration

Continued on page 63

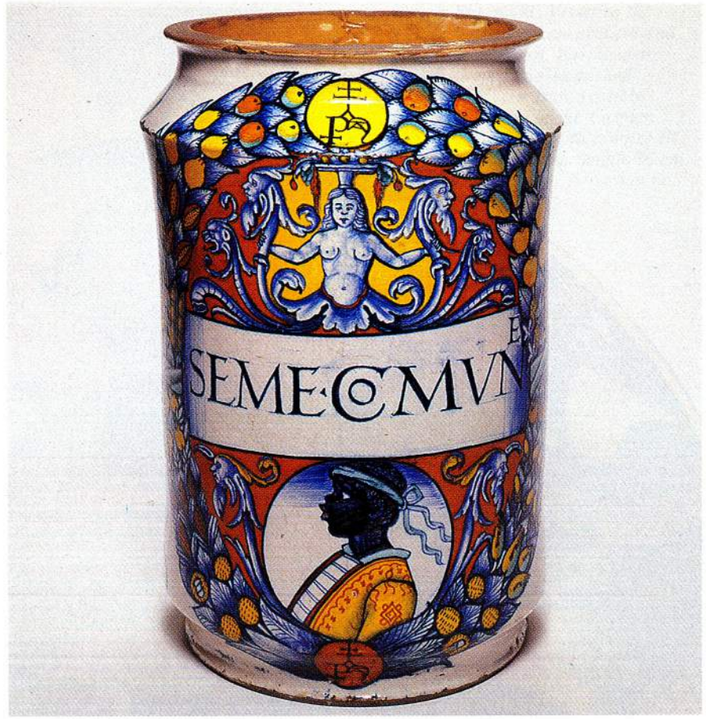


Figure 23. Albarello (monastic pharmacy vessel). Tin-glazed earthenware, polychromed. Italy, Deruta. Inscribed: seme comune (common seed), 1501. Height 31.1 cm. Accession no. 79.5.6.

Figure 24. Dish with idealised female portrait. Tin-glazed earthenware, polychromed. Italy, Castel Durante. Inscribed: Madalena Diva, 1547. Diameter 22.2 cm. Accession no. 78.2.18.

Figure 25. Plate with the abduction of Helen. Tin-glazed earthenware, polychromed. Italy, Urbino. Circa 1530 to 1540. Diameter 51.1 cm. Accession no. 78.2.20.

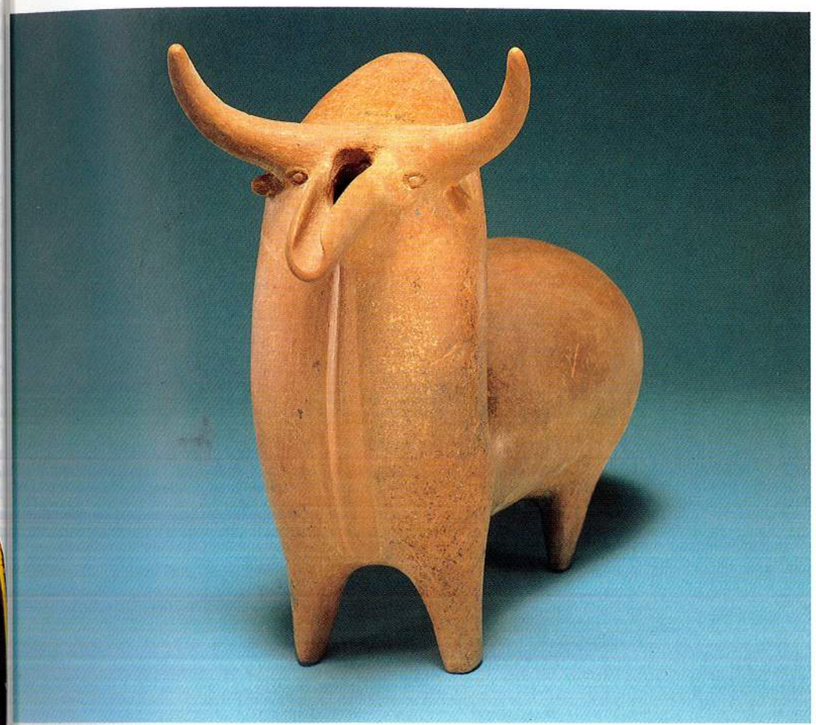


Figure 26. Vessel in the form of a hunchbacked and horned bull. Earthenware, slipped and burnished. Northern Iran, possibly southwest of the Caspian Sea. 10th or 9th century BC. Height 28 cm, length 36 cm, width 15 cm. Accession no. 12.9.85-3.

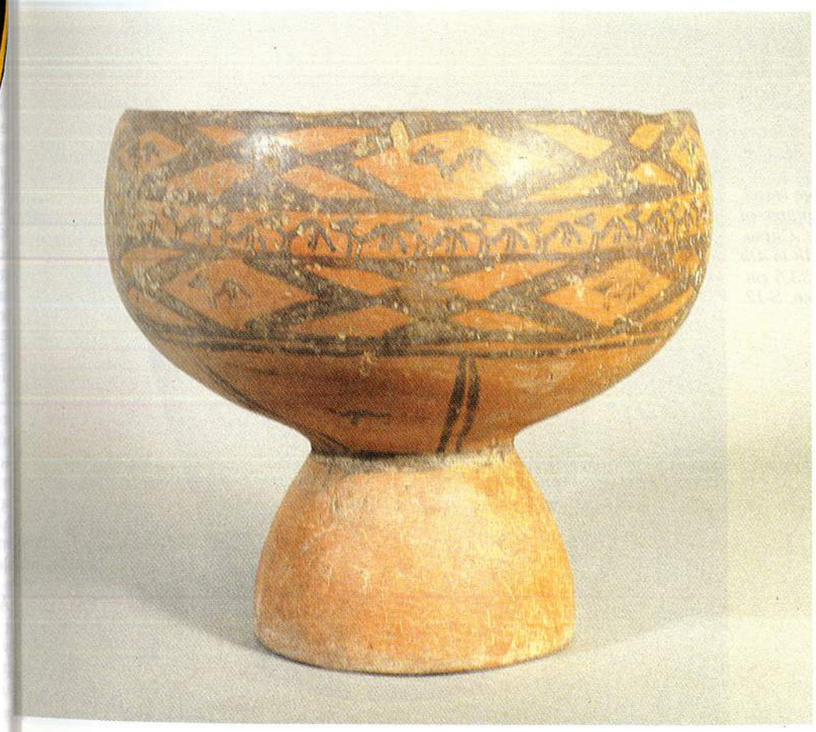


Figure 27. Footed bowl. Earthenware, slipped, burnished and painted. Central Iran. Late 5th to early 6th millennium BC. Height 25 cm, diameter 27.5 cm. Accession no. 70.2.2.

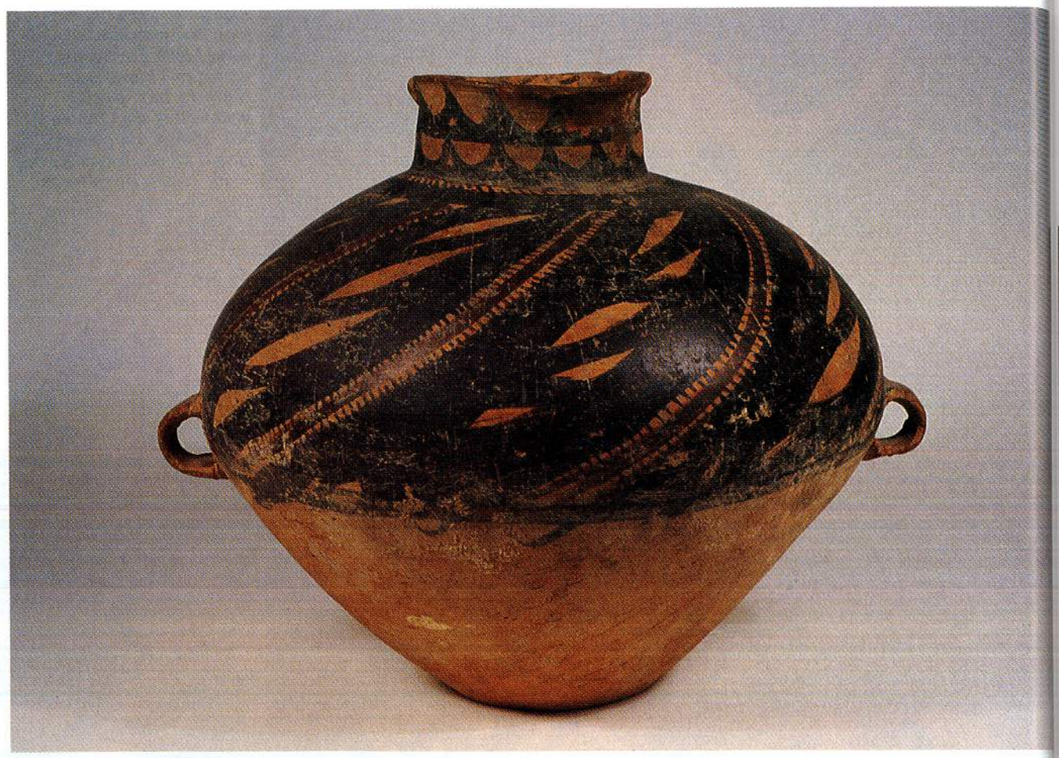
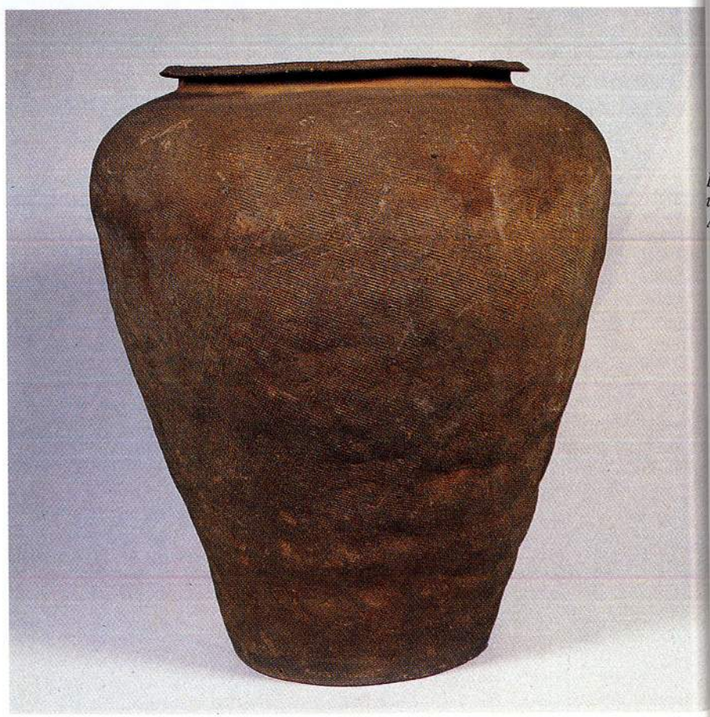


Figure 28. Large storage urn. Earthenware, slipped, painted and burnished. China, Kansu province. Neolithic period. Yanshao Culture, Banshan Culture Phase. Late 3rd to 2nd millennium BC. Height 28.9 cm. Accession no. C-2.

Figure 29. Large storage vessel. Stoneware, hand built, with unpressed linenweave pattern on exterior. China. Eastern Zhou dynasty, 5th to 4th centuries BC. Height 33.5 cm. Accession no. S-12.



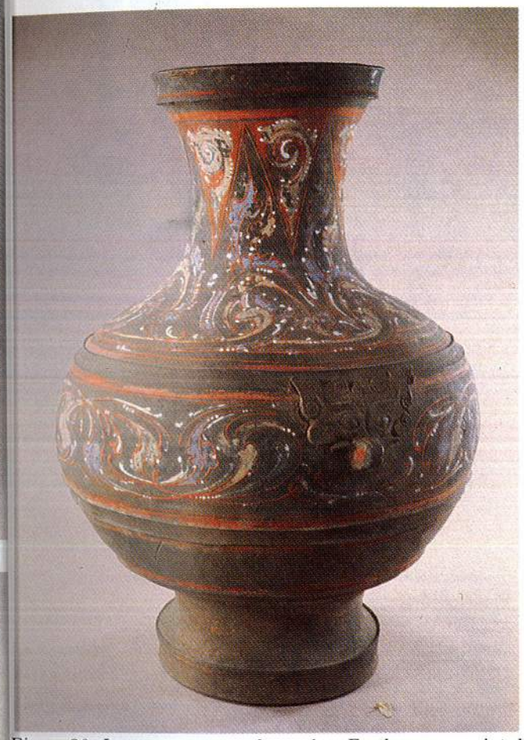


Figure 30. Large storage vessel, type hu. *Earthenware, painted with cold unfired pigments. China. Han dynasty. Height 54 cm. Accession no. 72.3.33.*

Figure 31. Tomb guardian. One of a pair. Earthenware with mottled lead glazes. China. Shaanxi or Henan ware. Tang dynasty. Early 8th century. Height 98.0 cm. Accession no. C-510a.

Figure 32. Ewer with dragon head spout and handle. Light gray stoneware under a black glaze suffused with bluish-white splashes. China, Henan Province, Jiaxian. From the Huangdao kilns. Tang dynasty. Height to top of handle 28.2 cm, maximum width 27.2 cm. Accession no. 72.3.31.

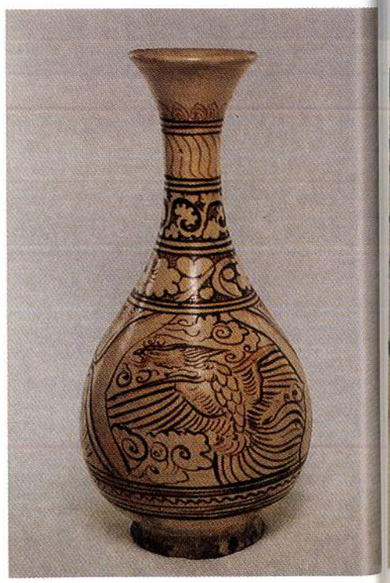


Figure 33. Bottle, yuhu chunping. Buff stoneware under a white Naolin slip painted with iron-black pigment all under a clear glaze. China, Shaanxi or Henan province. Cizhou-type ware. Jin dynasty (AD 1115 to 1234). Accession no. 69.3.28.

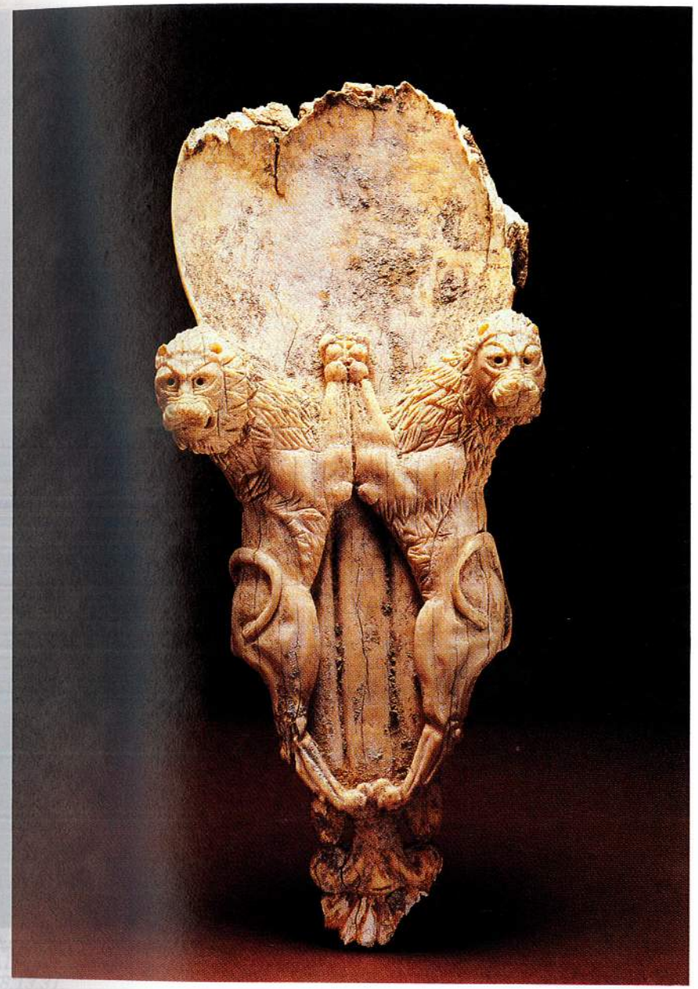
Figure 34. Paeonies. *Leaf D from an album of nine paintings by Tao-chi. Ink and colour on paper. China, circa 1698. Accession no. XXVD.*

Figure 35 (below). Lotus and red polygonum. *Leaf E from an album of nine paintings by Tao-chi. Ink and colour on paper. China, circa 1698. Accession no. XXVE.*

Figure 36. Rhyton with lynx proton. Silver. Iran, Sassanian period (AD 224 to 647). Height 35 cm. Accession no. 86.2.29.

Figure 37 (top right). Shallow bowl with ornament handle. Ivory. Iran. Early 1st millennium BC. Length 21.1 cm. Accession no. 85.1.2.

Figure 38 (bottom right). Finial or cup in the form of a lion's head. Ivory. Syria or Northern Mesopotamia. First half of 1st millennium BC. Height 8 cm, width 14.9 cm, depth 6.7 cm. Accession no. 84.3.3.



Continued from page 55

that his only regret was the lack of time. And he felt the pressure of time passing. When I began to work for him in 1973 he regretted that he had not collected more Indian and Southeast Asian art. At the time, most of the Indian and Southeast Asian art in his collection was on loan to the Brooklyn Museum, New York. The objects were lent to Brooklyn beginning in 1967.

Although Dr Sackler's Chinese art collection was familiar to many, no one knew about the Indian and Southeast Asian art he had acquired. While selecting some of his Chinese objects for an exhibition to be held at the China Institute in America, New York, in 1966, I came upon Indian and Southeast Asian sculptures still packed in crates in a warehouse where part of his collection was stored. I immediately asked if the sculptures could be lent to my department at the Brooklyn Museum. He was delighted to lend them since Indian and Southeast Asian art was then a new departure for him and he was pleased to have his taste confirmed. In addition, the museum was able to borrow some of the Indian miniatures he had begun to collect. Most of the Indian and Southeast Asian sculptures were subsequently selected as part of the gift to the nation and are now in the Arthur M Sackler Gallery, Washington DC (Figures 39, 40 and 41). Unfortunately, time did not allow for additions to these collections, although it was his intention 'to get to it some day'. He did, however, help the Arthur M Sackler Gallery acquire a large, spectacular collection of Indian and Persian miniatures, some of which are exhibited in the Gallery as part of his collection (Figure 42).

Arthur Sackler collected Western art in his early days as a collector and he never lost the taste for it. In fact, in 1972, he turned his attention to the drawings and etchings of Giovanni Battista Piranesi (1720–1778). Dr Sackler needed little urging to acquire twenty-three of twenty-five original Piranesi presentation drawings for the expansion and renovation of the Choir of Rome's ancient basilica, San Giovanni in Laterano, one of the oldest and most important churches in Christendom. Professor Rudolf Wittkower, then head of the Department of Art History and Archeology, Columbia University, considered these rare drawings 'one of the greatest Piranesi discoveries in many years'. With Professor Wittkower's encouragement, Dr Sackler not only acquired the twenty-three drawings but a large collection of Piranesi etchings as well. All were given as a gift to the Avery Architectural Library, Columbia University (see Figures 43, 44, 45 and 46).

In his foreword to the catalogue of the collection, Dr Sackler dedicated the

exhibition to Rudolph Wittkower. Typically, Dr Sackler commented that a dedication to Rudolph Wittkower, acknowledged for his scholarship and leadership, 'in effect [consecrated] . . these works of art to those who hopefully all of us serve — the students and scholars of today and tomorrow'. Subsequently, the Arthur M Sackler Foundation, at Dr Sackler's request, circulated a large exhibition of the Piranesi drawings and etchings to many museums, large and small, for many, many years.

Art always caught Arthur Sackler's attention and indeed he had that difficult-to-describe, difficult-to-define quality referred to as an 'eye'. He was always looking, always collecting and always in touch with dealers in the United States and elsewhere. While looking, in the mid 1970s he once again began to acquire European sculpture. A terra-cotta male head by Algardi charged his new interest. Although he was unable to buy it because the Algardi was already reserved by a mid-western American museum, he was excited by the immediacy of the terra-cotta medium and decided to acquire terra-cotta sculptures. He saw them as sketches which revealed all the turns of the artist's creative inspiration and imagination. He later described them as 'fingerprints of the artist'. His European terra-cotta sculpture collection was catalogued by Charles Avery, formerly Assistant Keeper of European Sculpture at the Victoria and Albert Museum, London, and was exhibited at the National Gallery, Washington DC, the Metropolitan Museum of Art, New York, and the Fogg Art Museum, Cambridge, Massachusetts, from 1978 through 1980 (see Figures 47, 48, 49 and 50). Even after the catalogue was completed, Dr Sackler's fondness for the medium propelled him to continue acquiring such sculptures and to form a collection for his wife, Jill.

While pursuing terra-cotta sculpture, Italian maiolica and European bronze sculptures began to attract his attention and he assembled collections of both. The maiolica was first exhibited in 1982 at the National Gallery, Washington DC. It was on exhibition at the San Francisco Art Museums, in the California Palace of the Legion of Honor, from 1986 through 1988 (see Figures 23, 24 and 25). He looked forward to seeing the European bronze sculpture collection exhibited at the Fitzwilliam Museum, Cambridge, England (Figures 51 and 52).

His last art purchases in May 1987 were for his European bronze sculpture collection. It was with those purchases that I saw once again the expression of wonder, surprise and pleasure on Arthur Sackler's face. He told the dealer whose gallery we were visiting that we had come only to look, not to buy. Nor did he intend to buy. But his eyes could not stop looking, nor could he contain his enthusiasm for and excitement about the sculptures we were shown. A few hours later he told me, with enormous satisfaction, that he had bought the European bronze sculptures we had admired together. His enthusiasm was inspirational and his joy in collecting was infectious. ●

LOIS KATZ

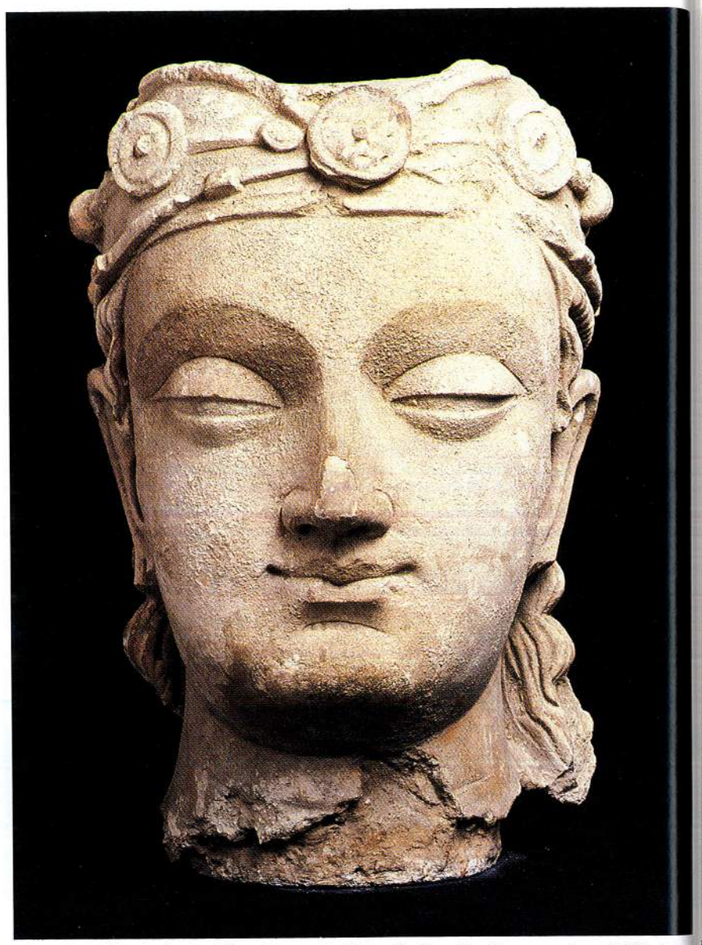


Figure 39. Head of a Buddha. Stucco. Pakistan/India, Gandhran region. AD 2nd to 4 centuries. Height 53.3 cm. Accession no. s-483.

Figure 40. Seated matrika figure. Gray granite. India, Kanci. AD 9th or 10th century. Height 117 cm. Accession no. L 68.13.31.

Figure 41. Standing figure of Uma. Brown stone. Cambodia. Khmer period, 10th to 12th century AD. Height 128 cm, width 37.8 cm, depth 24 cm. Accession no. 72.11.13.

Photographic credits
Prudence Cuming Associates, London: Figure 52.
Simon Feldman: Figures 1, 37, 38, 39 and 41.
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Murray Shear: Figures 16, 17, 18, 19, 20, 21, 22, 23, 24 and 25.
Bradley Sloman: Figures 29 and 36.
Stoetzer, Inc, Miami: Figure 26.
John Tsantes/Smithsonian Institution, Washington DC: Figures 2, 11, 12, 14, 15, 27, 31, 33, 40 and 42.

Credits
Figures 1, 2, 28, 30, 32, 37 and 38 *have been lent by Dr and Mrs Arthur M Sackler to the Arthur M Sackler Gallery, Washington DC.*
Figure 3 *is a gift from Dr Arthur M Sackler to the Metropolitan Museum of Art, New York.*
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Figures 43, 44, 45 and 46 *are gifts from Dr Arthur M Sackler to the Avery Architectural Library, Columbia University.*

Figure 42. School scene (Persian miniature). Opaque watercolour and gold on paper. Attributed to Mir Sayad Ali. Iran. Circa AD 1520. Height 27.3 cm, width 15.1 cm. Ex Vever Collection. Accession no. S86.0221.

Figure 43. Detail of Tavola Decima *(Drawing 10, Catalogue no. 10). Elevation looking east, showing the colonnade separating the ambulatory from the presbytery. Pen and grey ink on paper by Giovanni Battista Piranesi. 1764. Height 55.6 cm, width 89.3 cm.*

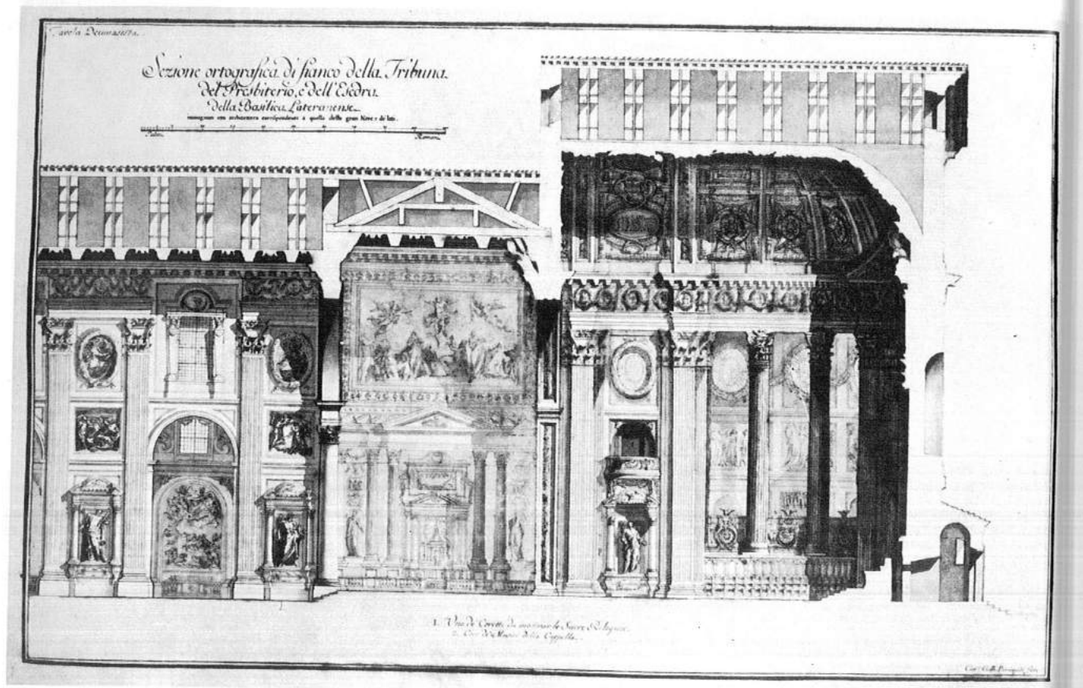


Figure 44. Tavola Decimasesta *(Drawing 16, Catalogue no. 15). Longitudinal section showing south wall of sanctuary, with transept and beginning of nave. Pen and grey ink on paper by Giovanni Battista Piranesi. 1764. Height 55.6 cm, width 89.3 cm.*

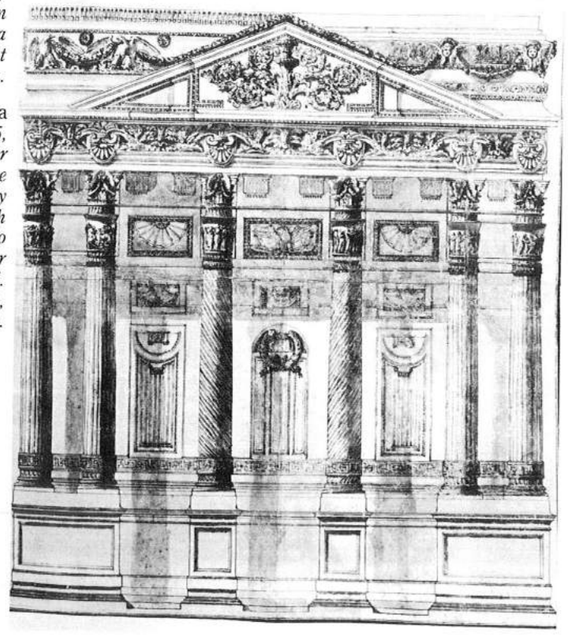


Figure 45. Tavola Vigesimaquinta *(Drawing 25, Catalogue no. 23). Design for colonnade separating the ambulatory from the presbytery (seen in Drawing 10) with alternate version of attic to left. Pen and grey ink on paper by Giovanni Battista Piranesi. 1764. Height 90.3 cm, width 72.3 cm.*

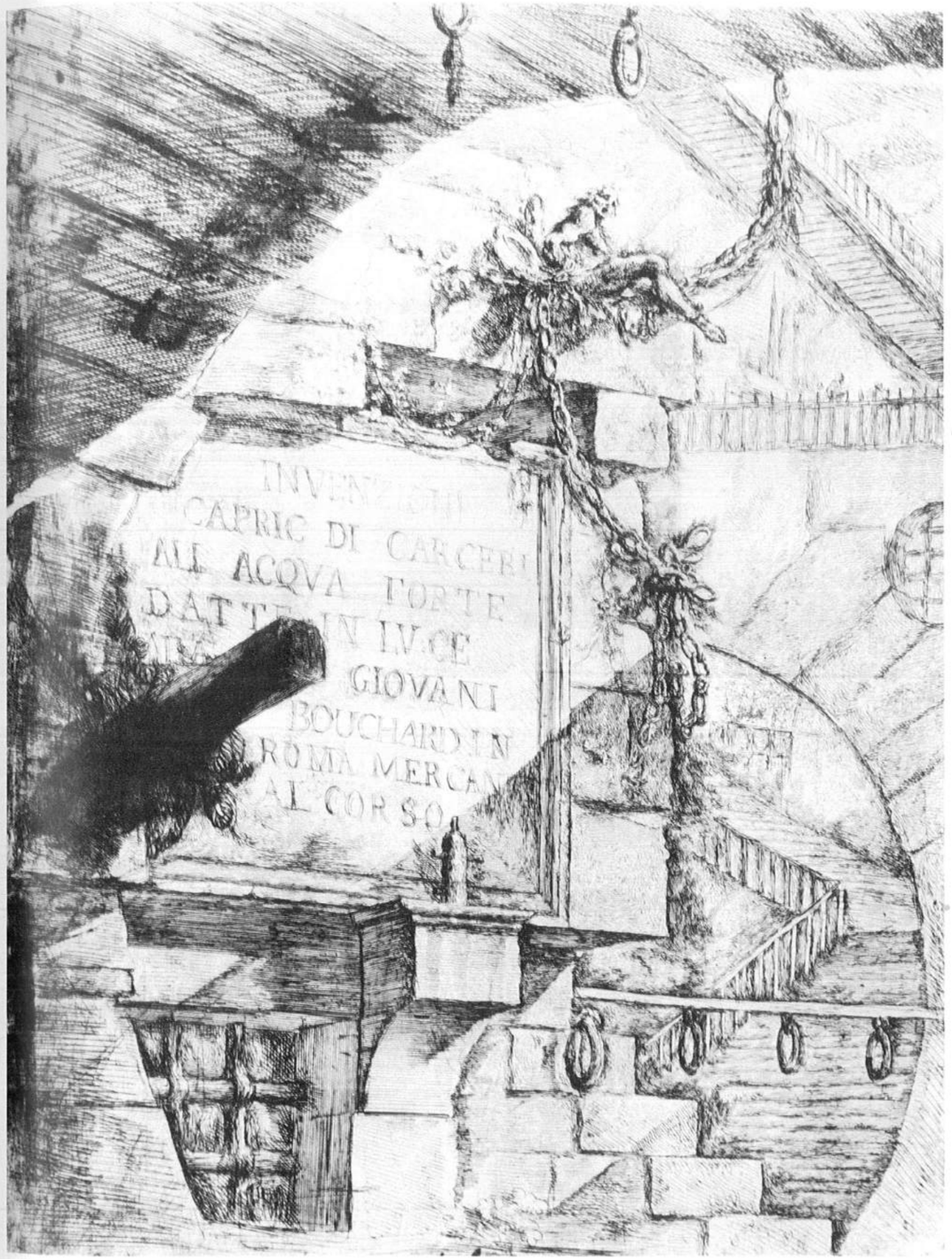


Figure 46. Title plate from The Carceri *(Catalogue no. 24a). State IA (Hind II). Etching on paper by Giovanni Battista Piranesi, late 1740s. Height 54 cm, width 41.4 cm.*

Figure 47 (right). Lamentation. *Terra-cotta by Giuseppa Mazzuoli (AD 1644–1725). Italy, Siena. Circa 1695. Height 137.2 cm, width 130.8 cm, depth 26.7 cm. Accession no. 77.5.51.*

Figure 48 (below left). Bust of Christ. *Polychrome terra-cotta. Circle of Guido Mazzoni (active 1473–1518). North Italian, late 15th century. Height 41.9 cm, width 48.9 cm, depth 24.7 cm. Accession no. 77.5.47.*

Figure 49 (below right). Virgin and child. *Terra-cotta by Master of the Unruly Children. Florentine, early 16th century. Height 73 cm, width 48.3 cm, depth 20.6 cm. Accession no. 77.5.14.*

Figure 50. The deposition of Christ. *Terra-cotta by Jacopo del Duca (circa 1520-post 1592). Roman, 16th century, circa 1565. Height 28 cm, width 21.5 cm, depth 5.7 cm. Accession no. 77.5.34.*

Figure 51. Mercury. *Bronze. Workshop of Giambologna. Florence, early 17th century. Height 175 cm. Accession no. 80.4.2. Inset: Detail of head.*

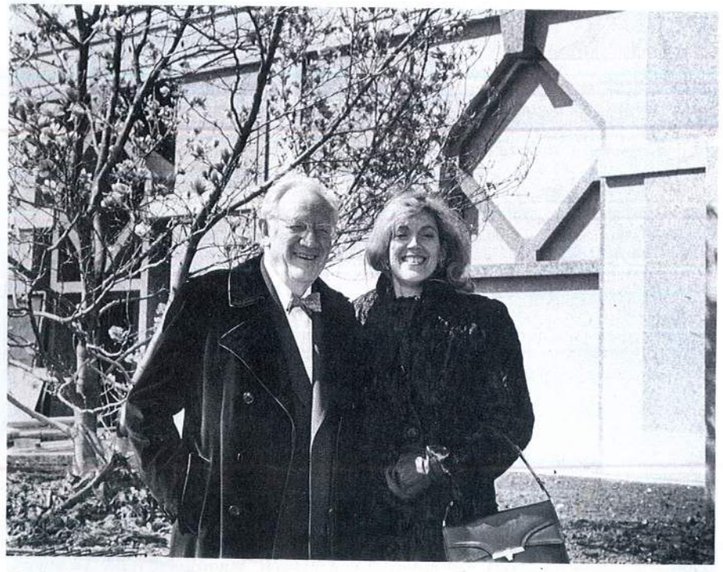
Figure 52. Hercules and a Centaur. *Gilt bronze by Antonio Susini. Florence, early 17th century. Height 37.5 cm. Accession no. 87.2.1.*

The Arthur M Sackler Gallery at the Smithsonian Institution, Washington DC

A new museum of Asian and Near Eastern Art

The Arthur M Sackler Gallery at the Smithsonian Institution opened to the public on 28th September, 1987. This is only one of many American institutions — primarily museums and university medical research facilities — that have been supported by Dr Sackler. His interest in art paralleled his interest in medical research and he was an independent thinker and entrepreneur in both areas. As Dr Sackler himself described it, 'Art and science are really two sides of the same coin. Science is a discipline pursued with passion; art is a passion pursued with discipline. At pursuing both, I've had a lot of fun.'

Dr Sackler's wide-ranging artistic enthusiasms were linked by his interest in understanding civilisation, society and humanity through the evidence of art. He was particularly fascinated by the way in which the ancient arts of Asia prefigure countless achievements in Western art and reveal the timeless fundamentals of human creativity. Dr Sackler knew well every object in his collections, did his own buying, and wrote persuasively about art and the issues it raised for him.



Dr Arthur Sackler and his wife, Jill, in front of the new gallery, April 1987.

Circumstances of gift

Under Secretary S Dillon Ripley's leadership, the Smithsonian Institution was evolving plans to expand its facilities for African and Asian art long before Dr Sackler's involvement. The Smithsonian needed a new home for its collection of African art, and the Freer Gallery of Art was restricted in its ability to make loans to or from the collection.

Dr Sackler's 1982 commitment of funds towards a building, and his gift of 1000 objects from his incomparable collection of Chinese and ancient Near Eastern art, represented a turning point for the entire project. It was then that Congress appropriated funds for the new galleries and the nature of the building to house the African and Sackler collections was determined. Half of the total funding came from the Federal Government and half from the Smithsonian trust funds and gifts from foundations, individuals and foreign governments.

A perfect match

Smithsonian officials had hoped to find a single private collection to form the basis of a new gallery of Asian art, and Arthur Sackler's collection was distinguished by its size, the thoroughness with which Dr Sackler bought groups of works, and the high level of quality insured by Dr Sackler's good eye and concern with documentation.

According to Thomas Lawton, the then Director of the Freer Gallery, the addition of the Arthur M Sackler Gallery to the Freer Gallery of Art has made the Smithsonian Institution *the* centre in the West for the study of Asian art, unique in its combination of collections, library, conservation facilities, curatorial staff and focus on research.

Over time, there was considerable competition for the Sackler collection of Asian art, but the Smithsonian appealed to Arthur Sackler in a number of ways. As a collector with an exceptional commitment to scholarly research and publication, Dr Sackler was naturally drawn to the Smithsonian, which functions as much as an educational institution as a museum. The collection of the Freer Gallery of Art, whose resources he greatly admired, would be an estimable counterpart to his own.

He knew that a location in Washington, on the Mall, would mean that his collection would be made widely available to large numbers of people, and that the Smithsonian had the resources to circulate the collection internationally. Finally, Arthur Sackler and S Dillon Ripley were compatible personalities, with friends in common, accustomed to thinking and operating on a grand scale, who shared the dream of creating a centre devoted to cultural exchange and understanding which would further the cause of world peace.

The personal importance to Arthur Sackler of this donation to his country is suggested by the fact that the Smithsonian Institution is *the* national cultural institution of the United States. He expressed to Thomas Lawton his feeling that 'For someone with my background — only in the United States could I have been so successful — this is my gift of thanks'.

Selection of the collection

Thomas Lawton, the then Director of the Freer Gallery and the Smithsonian's leading specialist in Chinese art, was responsible for the selection of the collection for the Sackler Gallery. Already familiar with much of Dr Sackler's Asian art from exhibitions and publications, Lawton studied more than 10,000 works stored in warehouses; in storerooms at the Metropolitan Museum of Art, New York; and at Princetown, Columbia and Yale Universities; and in Dr Sackler's office and home.

He focused his attention on the strengths of the Sackler collection: the Chinese jades and bronzes and the ancient Near Eastern material. These areas were unsurpassed in breadth, both chronologically and geographically — as well as in quality.

Throughout the selection process, there was on-going discussion between Dr Lawton and Dr Sackler. Believing as a scientist that 'a large enough corpus of data' was a prerequisite for understanding, Dr Sackler was concerned with maintaining the coherence of bodies of works within the collection, suggesting that if the Smithsonian was interested in some of a group of bronzes or jades, it should take them all.

More personal was the gift of the fourth-century Middle Eastern animal head rhyton in silver and gilt. Having initially refused Dr Lawton's request for this piece because he had given it to his daughter, Dr Sackler soon called Dr Lawton to say that his daughter, Dr Carol Master, and he both felt that the rhyton should be part of the Gallery's permanent collection.

As the selection proceeded, Thomas Lawton realised he was putting on his 'wish list' works whose total worth exceeded the sum originally stipulated. Dr Sackler repeatedly assured him that he should disregard this consideration and proceed with assembling all the pieces he most wanted for the new gallery's collection. Nonetheless, the excess was something the Smithsonian officials had to think about.

After the final list of desired objects

Animal head rhyton. Silver. Iran, Sassanian period (AD 224 to 640). Height 12.6 cm. Diameter 14.2 cm.

was submitted to Dr Sackler, Charles Blitzer, then Assistant Secretary for History and Art at the Smithsonian, received a telephone call from the donor saying that there was a problem with the selection. Fearing the worst, Mr Blitzer was delighted to learn that the 'problem' was that the Smithsonian had not asked for the Chinese hardwood furniture. Needless to say, the furniture was added to the collection.

Architecture

The Arthur M Sackler Gallery occupies three floors of an underground complex which also houses, as a separate institution, the National Museum of African Art, as well as the International Center, and offices of the Smithsonian's Directorate of International Activities, Travelling Exhibition Services and the National and Resident Associate Program. This complex is almost entirely underground because of the spatial restrictions accompanying the Sackler Gallery's necessary connection to the Freer Gallery.

The project was designed by Shepley, Bulfinch, Richardson and Abbott of Boston, with Jean-Paul Carlhian and Richard M Potter as the principal architects. Above ground, the deceptively simple structures of the Sackler Gallery, the African Museum, and circular entry pavilion are complemented by the Enid A Haupt Garden whose partly Asian-inspired, partly African, and partly Victorian design is compatible with the adjacent buildings.

Internally, the Sackler Gallery has 115,000 square feet of usable space of which 22,000 feet constitute the public areas of the museum. The public space was designed as an open shell that would provide maximum flexibility to accommodate the wide variety of exhibitions envisioned by Thomas Lawton and Milo C Beach, the Sackler Gallery's Director. The floor plan of the galleries can be totally reconfigured to create galleries of various sizes, and ceilings can be raised and lowered in some places as well. In addition to two floors of exhibition galleries, there are extensive storage areas, with the spaces reserved for the permanent collection designed as open storage to facilitate study by students and scholars.

The collection

The collection has strong concentrations of work from the ancient Near East and of Chinese art from the Neolithic period up to the present. It is unrivalled in its ancient Chinese material. Complementing the Freer's small collection of Chinese bronzes from metropolitan foundries, the 154 Sackler bronzes from regional centres afford a new understanding of the extent of artistic production all over China from the Shang (circa 1523 to circa 1028 BC) through to the Han (206 BC to 220 AD) dynasties. The collection of 475 jades, dating from Neolithic times to the twentieth century — unequalled outside of Asia — gives a similarly panoramic view.

The Sackler gift includes Chinese paintings from the tenth through to the twentieth centuries; examples of Chinese lacquerwork; Near Eastern metalwork and ceramics; and sculpture from Japan, Cambodia, Thailand, India, Afghanistan and Pakistan.

The single most famous object in Dr Sackler's collection is the Chu silk manuscript from the fifth to fourth centuries BC whose historical importance is so great that Dr Sackler loaned it to the Gallery, rather than giving it, because he felt that the manuscript should one day return to China. Other works of distinction include: a graduated set of six bells, *zhong,* sixth century BC, from the Eastern Zhou dynasty that are rarely found outside China; a long jade blade, *Chan,* second millennium BC, Shang dynasty, which has no equal in size and date in Western collections; a bronze ritual vessel, type *funding you* from the Western Zhou dynasty, tenth century BC; a bronze ritual wine vessel, type *you* from the Shang dynasty, thirteenth century BC; and small jade animals exquisitely crafted to maximise qualities of colour and pattern inherent in the material.

Inaugural exhibitions

At its opening, the Gallery presented almost all the works included in Dr Sackler's original gift in the context of four large exhibitions, each with its own theme, as well as in three smaller installations of Persian and Indian paintings, and of sculpture from China, and South and Southeast Asia. A fully illustrated book, *Asian Art in the Arthur M Sackler Gallery: the Inaugural Gift,* accompanied the inaugural exhibitions.

The installations of these exhibitions were carefully designed in scale and detail by Patrick Sears (the Sackler Gallery's Chief Designer), John Zelenik and their colleagues in the Department of Design and Installation to reach out to people who do not know about Asia. The Gallery was, for the most part, broken into small spaces because most of the Sackler objects are small in size. Dramatic installations, with generalised architectural and decorative details reflecting the cultural ambiance of the origins of the objects, helped make the works more appealing to visitors. Maps of the areas from which the objects come were located in many galleries. Labels were not intrusive but easy to read, with subtle colour changes in the typeface used to differentiate object descriptions from general statements.

Monsters, Myths and Minerals is an exhibition as imaginative as its name in presenting 126 Chinese depictions of animals and monsters, mostly from the Han dynasty, in jade, minerals, stone, silver, ceramic and lacquer. The elegant installation makes clear the high quality of craftsmanship in a wide variety of materials, as well as the range of formal invention that the Chinese brought to this subject.

Pavilions and Immortal Mountains: Chinese Decorative Art and Painting com-

Dr Sackler at the site for his new gallery in 1986.

Ritual wine vessel, type funding you. *Bronze. China, Western Zhou dynasty, 10th century BC. Height including handle 28.2 cm, width 22.6 cm.*

bines 120 paintings, furniture, and objects in lacquer, jade and ceramic dating from the tenth through to the twentieth centuries in installations that suggest the ways in which these objects belonged to an on-going intellectual aesthetic devoted to scholarship and antiquity. Groupings also illustrate the formal continuities and permutations that occurred among objects in different media through time. Sixteen masterworks of pegged wooden furniture from the Ming dynasty (1368-1644) are among the most striking works in this exhibition.

The entrance to *In Praise of Ancestors: Ritual Objects from China* is a simple staircase descending in front of a photo mural of a view down into a Shang tomb, with the ceiling above based on early Chinese tombs, subtly suggesting to the visitor that all the objects in this exhibition were in fact discovered in tombs. This impressive exhibit — which makes clear the way in which the Sackler material itself suggested the themes chosen for the inaugural exhibitions — includes some 500 ancient jades and bronzes, some dating to 3000 BC, as well as the Chu manuscript, the earliest example of an illustrated Chinese text on silk.

Several ancient cultures from Iran, Anatolia and the Caucasus are represented by 124 objects in gold, silver, bronze, ceramic and ivory in the *Art of the Ancient Near East*. These objects, which date from the third millennium BC through to the mid-seventh century AD, range from ceremonial to utilitarian, and include silver and gilt rhytons dramatically visible from all angles in plexiglass vitrines.

Among the smaller exhibitions, that of fifteen Persian and Indian paintings from the fifteenth to the seventeenth century served as an introduction to a full-scale exhibition in late 1988 of the large group of paintings and manuscripts acquired by the Gallery since it was established. *Temple Sculptures of South and South East Asia* includes fifteen bronze and temple sculptures from India, Pakistan and Cambodia, dating from the third to the fourteenth centuries. Sixteen sculptures in stone and bronze reveal the evolution of *Chinese Buddhist and Daoist Imagery* from the second to the eleventh century.

Programmes and plans

The Sackler Gallery and the Freer Gallery operate under a single administrative and curatorial staff, and share a library and conservation laboratory. The two Galleries are regarded as separate museums, each having its own style — the Freer more specialised, the Sackler more popular in its mode of public address — and maintain separate acquisition funds to enhance their respective holdings, with a view to creating a comprehensive collection of Asian art overall.

International loan exhibitions — travelling shows originating elsewhere, as well as those organised by the Gallery — are the focus of the Sackler's activities, though part of the permanent collec-

Lotus. *Hanging scroll by Qi Baishi (1863–1957). Ink and colour on paper. China, Republic Period, dated 1939.*

Elephant. Jade. China. Ming dynasty, 14th to 17th centuries AD.

tion will always remain on view. The Sackler Gallery plans to present exhibitions devoted to folk art, architecture, photography, crafts and contemporary art, thus broadening the scope of attention given in most Asian museums.

Following the inaugural shows, the first exhibitions were *The Chinese Scholar's Studio; The Ganges River: Photographs by Raghubir Singh; Masterpieces of Persian and Indian Painting; The House of Timur: Princely Arts in Fifteenth-Century Iran;* and *Masterpieces of Che School Painting.* The Gallery will continue Dr Sackler's practice of organising exhibitions from the collection and circulating them to other institutions.

Research and publication are central to the Gallery's activities. In addition to catalogues of the permanent collection and temporary catalogues published by the Smithsonian Institution Press, the Sackler Gallery publishes, in conjunction with Oxford University Press, a quarterly journal called *Asian Art* which is wide-ranging in subject matter, interdisciplinary, and directed to a broad audience.

The long-term goal is to make the Sackler Gallery an active teaching institution at the highest level of scholarship, affording to specialists extended opportunities for study and discussion of special exhibitions, as well as of the permanent collection. Dr Lawton sees the museum as taking a larger educational role to compensate for the overall absence of Asian art courses in universities. Believing that Westerners are best informed about Chinese painting, he wants to increase the understanding of jade, furniture, ceramics and lacquers.

Milo Beach is interested in introducing a wider public, including children, to the glories of Asian art. Publications and an active education programme are directed towards building up a greater understanding of, and sympathy for, Asian art than has hitherto been possible. More traditional symposia and seminars are supplemented by a lively programme of Asian music and films.

Dr Sackler intended that the institutions he helped to establish — the Arthur M Sackler Museum at Harvard, the Arthur M Sackler Museum of Art and Archaeology now under construction in Beijing, and the Arthur M Sackler Gallery at the Smithsonian Institution — would benefit from the opportunity for interchange among themselves. This summer, a faculty member and graduate student from the Archaeology Department of Beijing University were brought to Washington under a grant from the Sackler Foundation to begin year-long museological training at the Sackler and Freer Galleries.

Conclusion

Although Dr Sackler died before the building's interior was complete and the collection fully installed, he had made many visits to the gallery during the past year and was reportedly euphoric in his response to the details of installation. This attention to meaningful contextual presentation, along with the striking quality of the collection, and the Gallery's ambitious plans for the future, will allow the Arthur M Sackler Gallery to attract a large audience to the arts of Asia and the Near East and will ensure that the Gallery takes its place among the great museums of the world. ●

MIRANDA McCLINTIC

Credits

Photographs of gallery by Kim Nielsen. Photographs of objects from the collection by John Tsantes, courtesy the Smithsonian Institution, Washington DC. Photograph of Dr Sackler by John McDonnell, *The Washington Post.*

The Smithsonian Institution building with the entrance pavilion to the Arthur M Sackler Gallery on the left and the National Museum of African Art on the right.

Ewer with female figures.
Silver and gilt.
Iran, 6th to 7th centuries.

A TRIBUTE FROM THOMAS LAWTON

**Founding Director,
Arthur M Sackler Gallery,
Washington, DC**

Arthur Sackler was an important person in my career from the moment I began to study Chinese art history. He was always generous in lending objects to exhibitions and, like so many other aspiring students, it was in museums throughout the United States that I had my first opportunity to study and admire his Chinese bronzes, jades and paintings. Because of their outstanding quality, examples from the Sackler collection have always been illustrated in any serious publication about Chinese art. So it was natural that the name of Arthur Sackler and the Chinese objects he owned should have played a crucial role in my research during the past thirty years.

In spite of my long-time awareness of Arthur Sackler, I did not meet him until the early 1980s. And then he entered my life — as he entered the lives of many other people — with all of the energy of a whirlwind. And my life was never the same again.

When the agreement between the Smithsonian Institution and Arthur Sackler was being discussed, I was asked to survey his Asian holdings. As you can imagine, that was not a simple task. I saw objects in Dr Sackler's home, in warehouses scattered throughout New York City, and in museums around the United States. While I had imagined my previous knowledge of the Sackler Asian collections was reasonably comprehensive, I soon realised how mistaken I was. For the more I looked, the more I saw. And, you will not be surprised to hear — especially from an acquisitive museum director — the more I saw, the more I hoped the Sackler Asian collections would become part of the Smithsonian.

Once the agreement between Arthur Sackler and the Smithsonian was signed, the planning for the new Sackler Gallery began in earnest. As we resolved the problems that inevitably arise in such a complex undertaking, no one could have been more helpful or understanding than Arthur Sackler.

Even though he did not live to see the opening of his new Asian museum, Dr Sackler followed its progress with keen interest. He watched as the massive foundations were dug. He climbed through the concrete skeleton of the superstructure with an agility that left me panting and struggling to keep up with him. And, when at last we began to install the first of his Asian objects in the exhibition galleries, he observed with considerable delight — there is no other word to describe his reaction — it was sheer, unadulterated delight — at how each piece would relate to the total concept. Already, before the building had been completed, Dr Sackler began to think of how the museum could be expanded and how he could help in organising research programmes and broadening the various areas of the collections.

Had he not chosen to be a scientist, I am certain that Arthur Sackler could have been an extraordinary museum director. Just to contemplate that possibility conjures up images of a series of exhibitions and programmes that would have made our current concept of a 'blockbuster' appear pale and shallow by contrast. Surely, we would have had to coin a new phrase to describe the scope of Arthur Sackler's exhibitions and programmes.

How can I define or describe a man like Arthur Sackler. He defies any standard definition or description. The usual adjectives and metaphors are equally inadequate. For Arthur Sackler was as complex and as many-sided, as capable of evoking many different responses, as are those art objects that he so cherished and which he so generously gave for the benefit of others.

My own recollections of this extraordinary man are rich, exuberant memories of an indefatigable collector who cared so much for life, and for people, and for art, that all of us who knew and who worked with him are the better for having been associated with him.

It is typical of Arthur Sackler that, because he cared so much for the arts himself, he wanted to share that fondness with others. And share it he did. On a truly breath-taking scale, he has enriched the lives of people, many of whom, like those of us at the Smithsonian, knew Arthur Sackler and were his friends. But there are — and certainly will continue to be — literally millions of other people, now and in the future, who will know Arthur Sackler and admire him because of his taste and his generosity in the arts.

So, with the opening of the Arthur M Sackler Gallery, we will be able to say to those people when they come to the Mall in Washington DC, if you would like to know more about this uniquely American patron of the arts, just look about you. ●

Smithsonian photo by Kim Nielsen

ARTHUR SACKLER AND THE AMERICAN ART MUSEUM

Arthur Sackler loved museums. He could often be found exploring a new exhibit or rediscovering an old one. But, unlike most museum visitors, Arthur Sackler did not merely wander among the treasures. He actively collected artifacts and built museums to house them.

Most recently, the Arthur M Sackler Gallery at the Smithsonian Institution opened on the Mall in Washington DC, displaying over twelve hundred Asian art objects from his collection. Dr Sackler contributed funds to help build the new museum, but, more importantly, gave an extraordinary art collection to fill its galleries.

Dr Sackler allowed the Smithsonian's Asian art expert, Dr Thomas Lawton, to select any one thousand objects from his collection, regarded by scholars as the world's greatest private holding of Chinese antiquities. This gift alone was estimated to be worth one hundred million dollars. When the curators wanted more pieces to fill the new museum's galleries, Dr Sackler gave them free access to his collection, lending them an additional two hundred and fifty objects.

The Arthur M Sackler Gallery is the nation's museum of Asian art, and Dr Sackler was proud to contribute to the nation the gift which made the gallery possible. He once said this museum's 'primary purpose will be to afford the opportunity for millions of Americans, who annually make pilgrimages to our capital, usually with their families, to observe the extent to which we, as a people, are organically linked to other peoples, both in time and in space. It is my hope that in presenting the manifestations of the cultures of the Pacific Basin, the Asiatic mainland (Japan, China, India) and the Middle East, Egypt and classical Greece and Rome, that this museum will serve that function which I believe to be the most important role for culture in the twenty-first century — the creation of bridges of understanding and mutual respect between peoples of different backgrounds regardless of faith, racial origin or political ideology.'

Once the new museum was established, Dr Sackler worked to help it expand its collection beyond his inaugural gift. For example, he was instrumental in ensuring that the famed Vever Collection of Islamic paintings would be purchased by the new gallery.

Generosity of this sort characterised Dr Sackler's relationships with many American museums. Indeed, he was one of the country's most generous benefactors. He provided the naming grant for a new museum at Harvard University which greatly expanded the fine arts programme there. The Arthur M Sackler Museum at Harvard displays the university's collection of Asian, Ancient Near Eastern and Classical antiquities, in addition to providing space for temporary exhibitions.

Dr Sackler was long aware of the limitations on Harvard's museum exhibition space as well as its cramped study and conservation areas. The Arthur M Sackler Museum at Harvard helped remedy this situation by allowing many more works of art to be properly exhibited. Seymour Slive, founding director of the museum, said at the opening: 'It's tremendous. Now we can show the principal works of our Oriental, Islamic and Ancient collections — these were never out before.'

In addition to increasing the gallery space, the Sackler Museum better equips Harvard for museum teaching and study. Faculty offices, study rooms and libraries are now located next to the galleries in both the Arthur M Sackler Museum and the Fogg Art Museum. Dr Sackler told the *Harvard Crimson* that the new museum 'would provide a wonderful environment for teaching, study, and research; for the opportunity of handling objects at close range, and for the potential of seeing objects in relation to each other, both in the formal setting of an exhibition, and the informal one of a seminar room.'

Dr Sackler's major gifts to American museums began in the 1960s. In 1965, the Arthur M Sackler Gallery for Early Chinese Stone Sculpture was dedicated at New York's Metropolitan Museum of Art. Large Chinese sculptures, which the museum previously had no space to exhibit, are now displayed in this gallery.

Of particular interest is a fourteenth-century Chinese temple fresco which for many decades had been stored in a tunnel under the museum. The fresco was

Dr Sackler was always enhancing, through gifts and loans, the collections of museums around the world. He felt that the larger and more important one's art collection became, the greater was one's responsibility to share it with the world.

cut up into dozens of blocks so it could be shipped to the museum, but could not be displayed because of a lack of funds to complete the restoration. With funding by Dr Sackler, the restoration became possible and the reconstructed Yuan dynasty Buddhist temple fresco is now exhibited on the wall facing the entrance to the gallery.

Also at the Metropolitan Museum of Art is the Sackler Wing which opened in 1978. The Sackler Wing, overlooking Central Park behind the right arm of the museum's façade, houses the Egyptian Temple of Dendur, a temple of the Roman period donated to the United States by the Egyptian government in 1968. The Metropolitan Museum of Art was temporary custodian of the Temple, but had no place to house it. 'There is no doubt in my mind' said Thomas Hoving, director of the Metropolitan Museum at the time, 'that without the contribution from Arthur Sackler the Metropolitan would not have the Temple today'.

At the Memorial Service for Dr Sackler at Harvard University, Hoving described the difficulty in finding a donor in New York to fund the new wing at a time just after the Six-Day War: 'The pieces [of the Temple] were out there in their crates under an inflatable air structure, and I happened to get the feeling that one person would understand that this wasn't a symbol of a country, a political ideology. This was civilization.'

Dr Sackler quickly agreed to provide the naming grant to build the new wing and also to donate a special exhibition hall and galleries of Asian art. For the opening of the Wing in 1978, the Tutankhamen exhibition was installed in the Sackler Exhibition Hall on the balcony overlooking the Temple of Dendur, an amazing setting for the presentation of Egyptian art. The Sackler Galleries for Asian Art currently house the Metropolitan's collection of Japanese art.

The new Chinese art galleries at the Metropolitan Museum also exhibit many works of art donated by Dr Sackler. He gave many gifts initially anonymously expecting that at some time they would be unveiled along with an exhibition entitled 'Masterpieces from the Dr Arthur M Sackler Collection'.

Unfortunately, changes in exhibition scheduling took place at the Metropolitan, and during that time Dillon Ripley, former Secretary of the Smithsonian Institution, came to New York to see Dr Sackler and the Sackler Collection. Immediately after seeing the art, he proposed that Dr Sackler consider giving a gift of part of his collection to create a museum of Asian art at the Smithsonian.

Dr Sackler agreed to give the Smithsonian funds and one thousand objects to begin their museum. Some saw this gift to the Smithsonian as a rejection of the Metropolitan Museum, but Dr Sackler saw it differently. He was not giving up his attachment to the Metropolitan Museum of Art. He had many more art objects in his collection than the thousand objects selected for Washington, and he intended to continue to collect. He always ensured that there would be enough for other museums to benefit. Had he lived, New York and the Metropolitan would, in time, have benefited even more from his generosity.

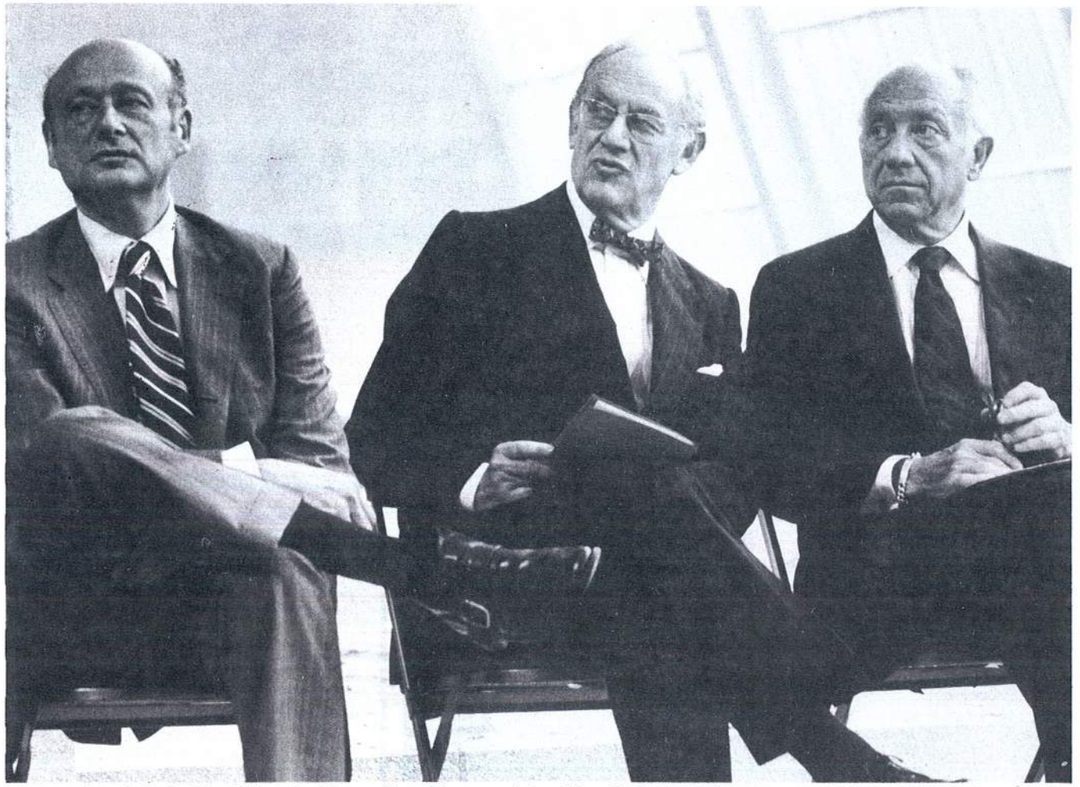
In the 1960s, Arthur Sackler also donated the Arthur M Sackler Galleries at Princeton University's Art Museum. These galleries house many paintings and works of Chinese art that Dr Sackler gave or bought for the art museum at Princeton. Although he collected on the same scale that museums did, Dr Sackler never competed with their purchases, always deferring to the curator who wanted to buy. As he did with Princeton and the Metropolitan, Dr Sackler frequently bought pieces specifically to give to a museum which was unable to make the purchase.

Another academic institution with which Dr Sackler worked closely in the 1960s was Columbia University. In the hopes of establishing an energetic university museum, Dr Sackler gave a large number of art objects and, until the museum was built, set up a permanent exhibition in the Sackler Faculty Room at Lowe Library which he donated in honour of his parents, Isaac and Sophie Sackler.

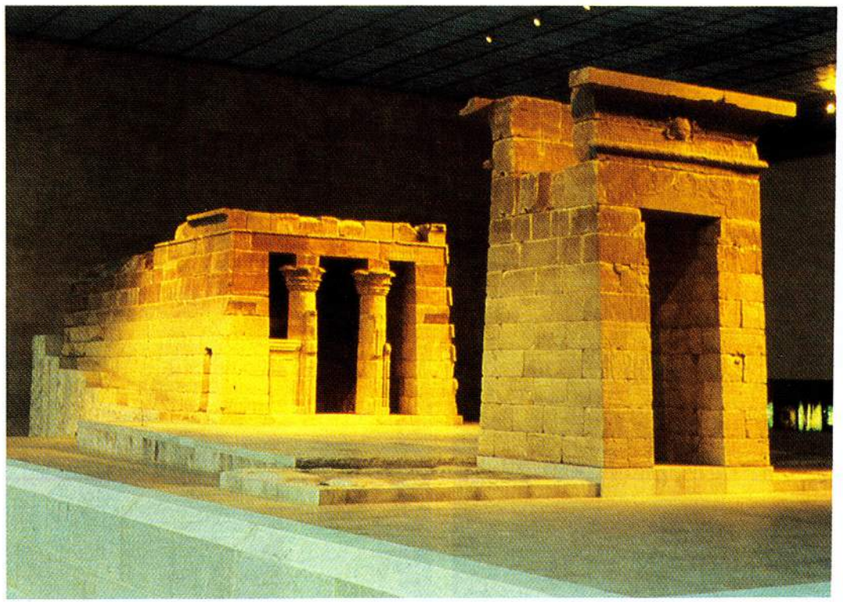
The installation took the visitor on a tour of Chinese art history, beginning with Neolithic ceramics and Shang dynasty (circa 1500–1025 BC) bronzes and jades, and proceeding step by step through the art of all the dynasties into the Qing (1644–1911), intending to give the visitor a sense of how the art evolved and changed over time as well as shedding new light on Chinese history. He also established the Sackler Laboratory for Art and Archaeology at Columbia, anticipating it as a future research facility and conservation centre for the museum-to-be.

The art that Dr Sackler gave to Columbia crossed many cultures and ages, ranging from Chinese antiquities to Impressionist paintings, all of which Dr Sackler located and purchased himself, as he did with all his art. Of particular importance was a large collection of Piranesi prints and drawings which he gave to the Avery Architectural Library in memory of Dr Rudolf Wittkower, the eminent art historian and Columbia professor who inspired Dr Sackler's acquisition of these drawings.

For various reasons, especially problems caused by student riots, Columbia University could not proceed with the proposed museum. Under the original contract, which set forth the terms and conditions of Dr Sackler's gift, the



The opening of the Sackler Wing, the Metropolitan Museum of Art, New York, September 1978. From left to right: Mayor Edward Koch, Dr Arthur M Sackler, Senator Jacob Javits.



The Temple of Dendur, the Sackler Wing, the Metropolitan Museum of Art, New York. Egyptian, Roman period, circa 20 BC. Gift of Arab Republic of Egypt, 1968.

Sackler collection at Columbia University is being divided between the University and other public institutions. The remaining Sackler pieces at Columbia will be used for study and display purposes and will form the core of any future museum collection there.

In addition to creating these new museums, wings and galleries, Dr Sackler was always enhancing, through gifts and loans, the collections of museums around the world. He felt that the larger and more important one's art collection became, the greater was one's responsibility to share it with the world. Besides giving and loaning specific works, he would lend entire collections to museums and universities, large and small. Dr Sackler especially liked to share his art with a part of the country or the world whose inhabitants normally did not have the opportunity to see the type of art available in his collections, such as a recent exhibition of Chinese ceramics in Jerusalem. The exhibitions were put together by Dr Sackler to teach the visitor something about the civilisations and periods that the art represented, just as he did with the permanent installation at Columbia.

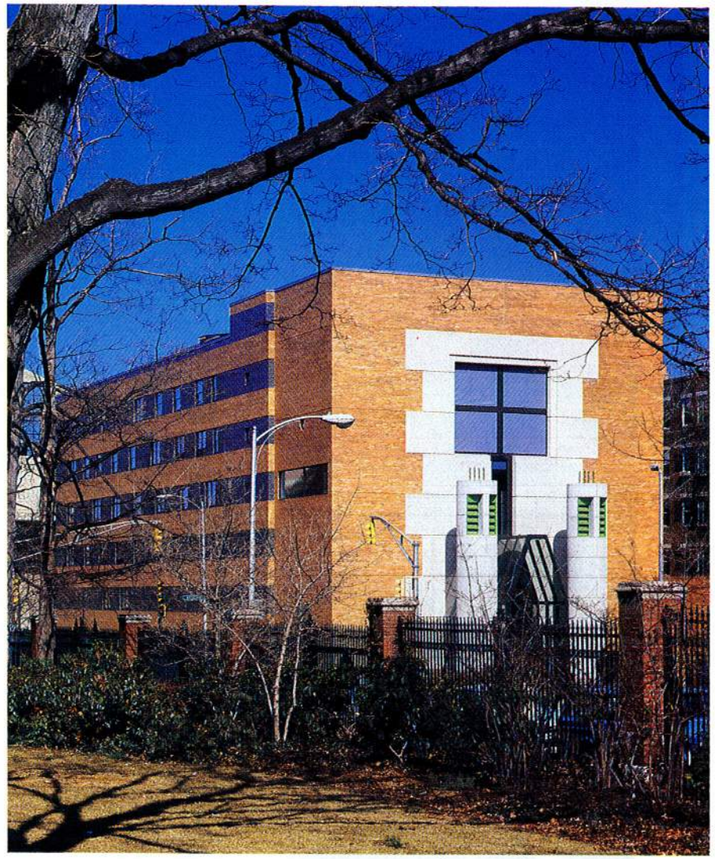
It is difficult to put Dr Sackler's relationship with museums and with art into words. His wife, Jill Sackler, has perhaps described it best: 'It was an exhilarating and enlightening experience to go with him to a museum and witness his innate understanding of the objects, aesthetically, historically, technically. To him art was the bridge between cultures and the expression of man's greatest spirit, giving hope for the ultimate understanding among people.' Dr Sackler helped to make the world aware of that spirit and hope. ●

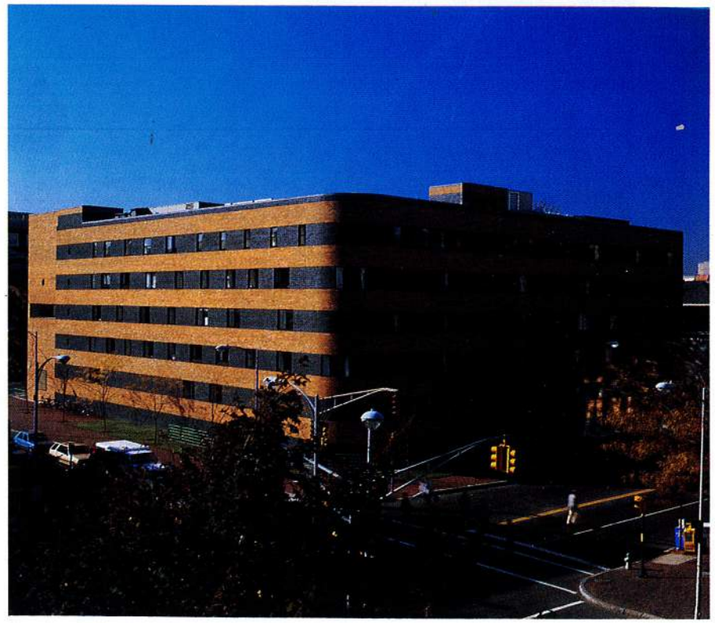
JOEL A GETZ

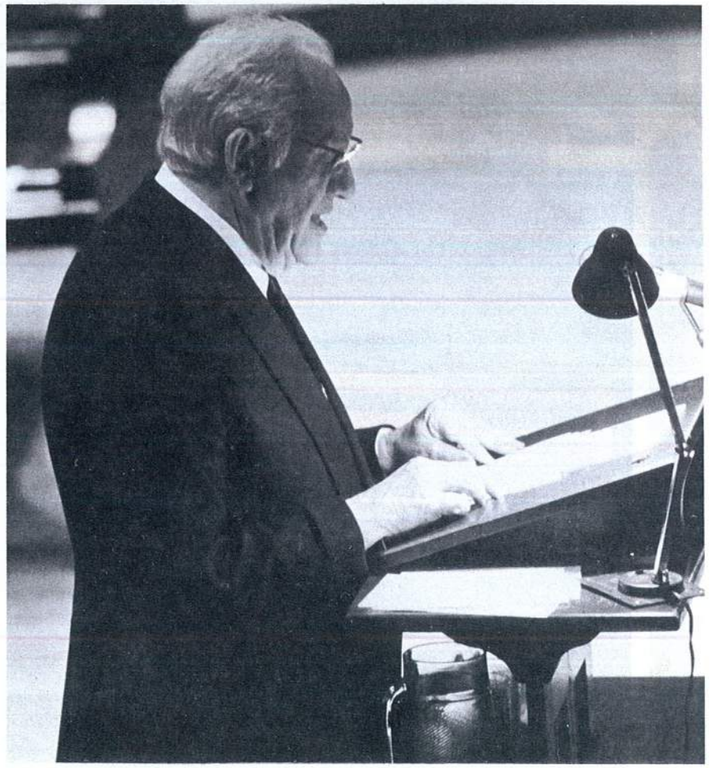
Left: Entrance façade. The Arthur M Sackler Museum, Harvard University. Photograph Richard Bryant/ARCAID.

Top right: Entrance façade from Harvard Yard. The Arthur M Sackler Museum, Harvard University. Photograph Richard Bryant/ARCAID.

Bottom right: Corner of Cambridge and Quincy Streets. The Arthur M Sackler Museum, Harvard University. Photograph Richard Bryant/ARCAID.

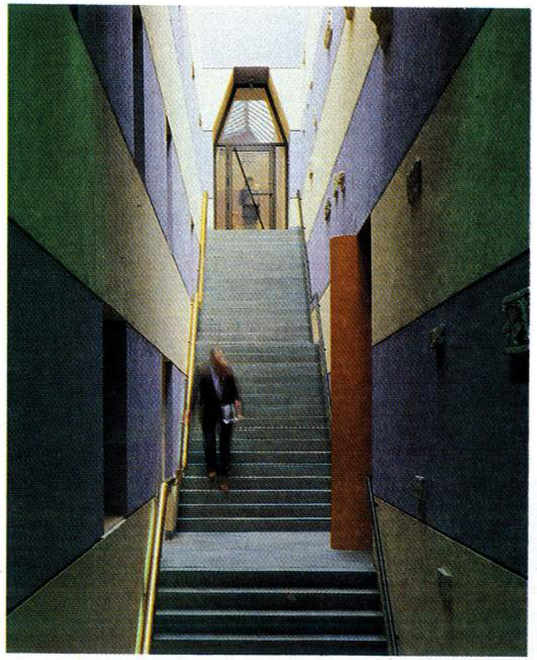


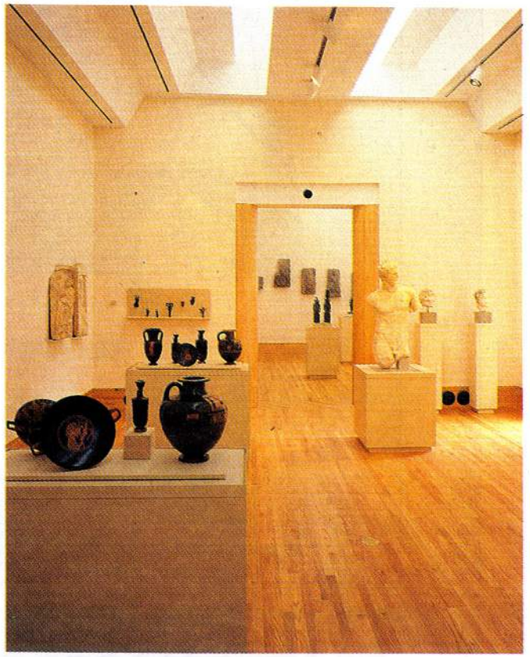


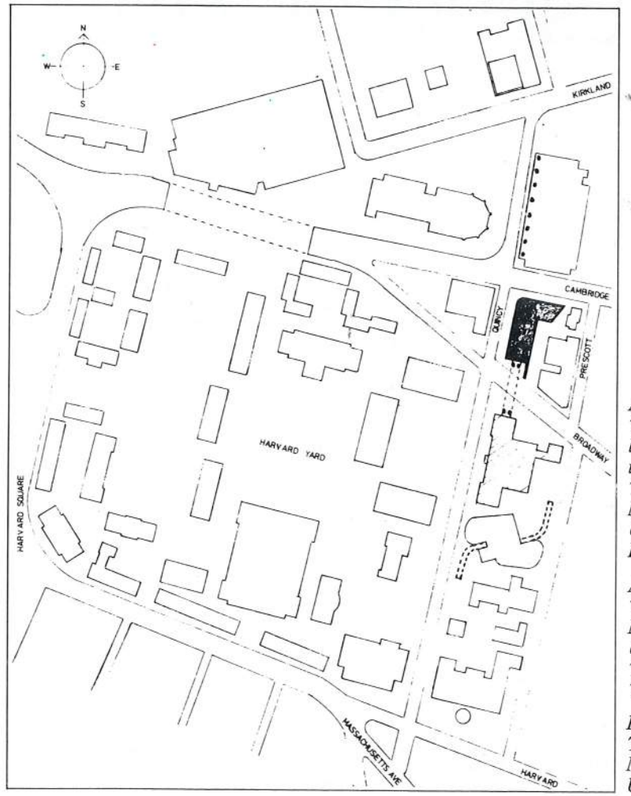


Above: Dr Arthur M Sackler looks on as a young violinist performs at the inauguration ceremonies of the Arthur M Sackler Museum. Sanders Theatre, Harvard University, 18th October, 1985.

Left: Dr Arthur M Sackler addresses assembled guests at the inauguration ceremonies of the Arthur M Sackler Museum. Sanders Theatre, Harvard University, 18th October, 1985.



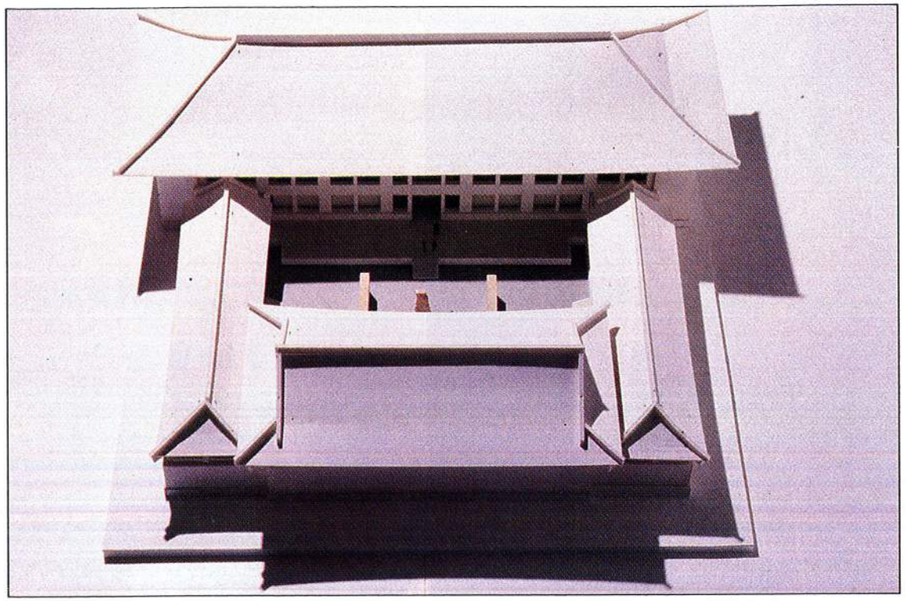




Above left: Interior view. The grand staircase looking towards the main entrance. The Arthur M Sackler Museum, Harvard University. Photograph Richard Bryant/ARCAID.

Above right: Interior view. The Arthur M Sackler Museum, Harvard University. Photograph Timothy Hursley — The Arkansas Office.

Left: Site plan. The Arthur M Sackler Museum, Harvard University.



THE ARTHUR M SACKLER MUSEUM OF ART AND ARCHAEOLOGY, BEIJING UNIVERSITY, CHINA

From the time of his first visit to China in 1976, Dr Arthur M Sackler had expressed a deep interest in helping the archaeologists and art historians of that country in their efforts to conserve the rich heritage of their ancient culture. Since the Revolution, the people of China have pursued many objectives in their efforts to build a fair and just society with limited resources. Dr Sackler understood that there was an opportunity to help this modernisation effort in a field which he knew well — the preservation and display of the arts of ancient China. Professor Wen Zhong, Secretary General of Beijing University, eloquently describes his first contacts with Dr Sackler and the genesis of the idea of building a modern museum for art and archaeology on the campus of Beijing University.

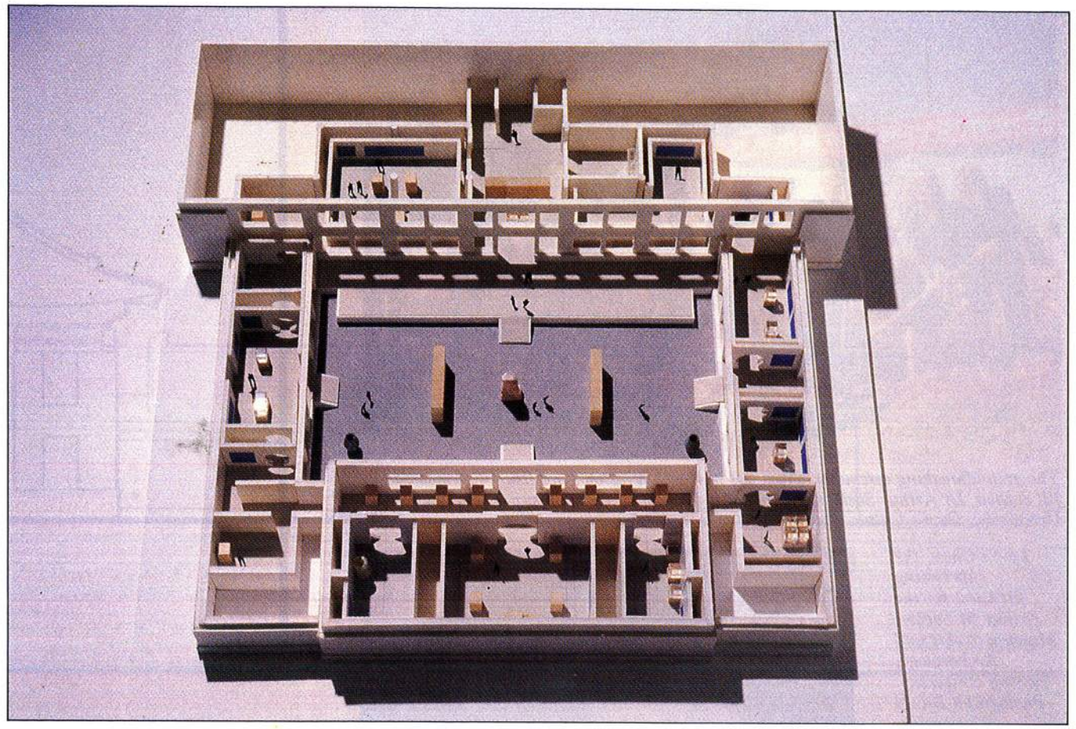
Once Dr Sackler had agreed to help in this project, he turned to one of the New York architects most experienced in construction in China, Lo-Yi Chan, of the firm of Prentice & Chan, Ohlhausen, who were recommended by the firm of I M Pei. It was agreed between the Sackler Foundation and the University that Mr Chan would become the supervising architect for the project, working closely with the architects and engineers from the University and with the firm of J Roger Preston & Partners, engineers in Hong Kong.

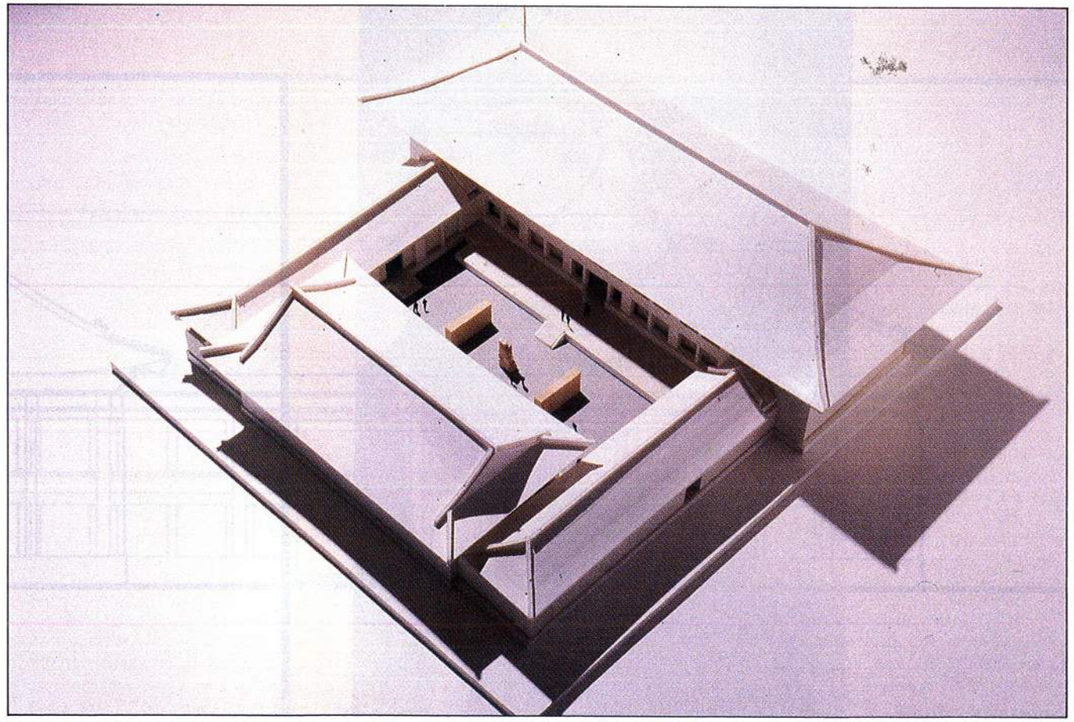
After a series of meetings, both in China and in New York, a plan for the museum was finally agreed upon which it was felt by all participants would meet the needs of the University and which would serve as a model of modern museum technology for China and the world. In creating this design, Mr Chan and his associates worked closely with Dr Thomas Lawton of the Smithsonian Institution in Washington DC and members of his staff.

The plan finally adopted incorporates some of the finest attributes of traditional Chinese architecture, but will include all of the modern technology necessary for the preservation, conservation and display of objects of great antiquity. In addition, the plan makes provision for classrooms for students in the faculty of archaeology; computer facilities; a library; storage facilities; and laboratories for conservation work. Most of these facilities will be in a three-storey structure built in the style of other buildings currently on the Beijing University campus, but additional galleries and a pavilion will surround a courtyard which will be used for the display of sculpture. The periphery of the building will also be bordered by a sculpture garden to be named for Dr Sackler's wife, The Jill Sackler Sculpture Garden, in accordance with one of his last wishes.

In conjunction with the construction of the new museum, the Sackler Foundation will also help prepare young Chinese archaeologists and curators by granting scholarships for study in American universities and museums. Once the museum is completed, these young experts will be able to contribute their knowledge to its future development. They will, of course, be working closely with the director of the museum, Professor Su Bai, one of China's most distinguished archaeologists. ●

CURTIS C CUTTER

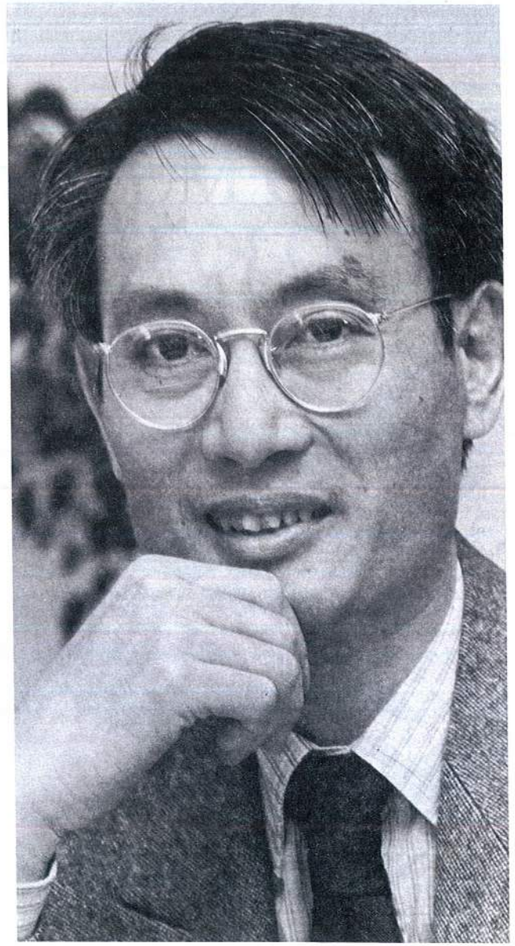


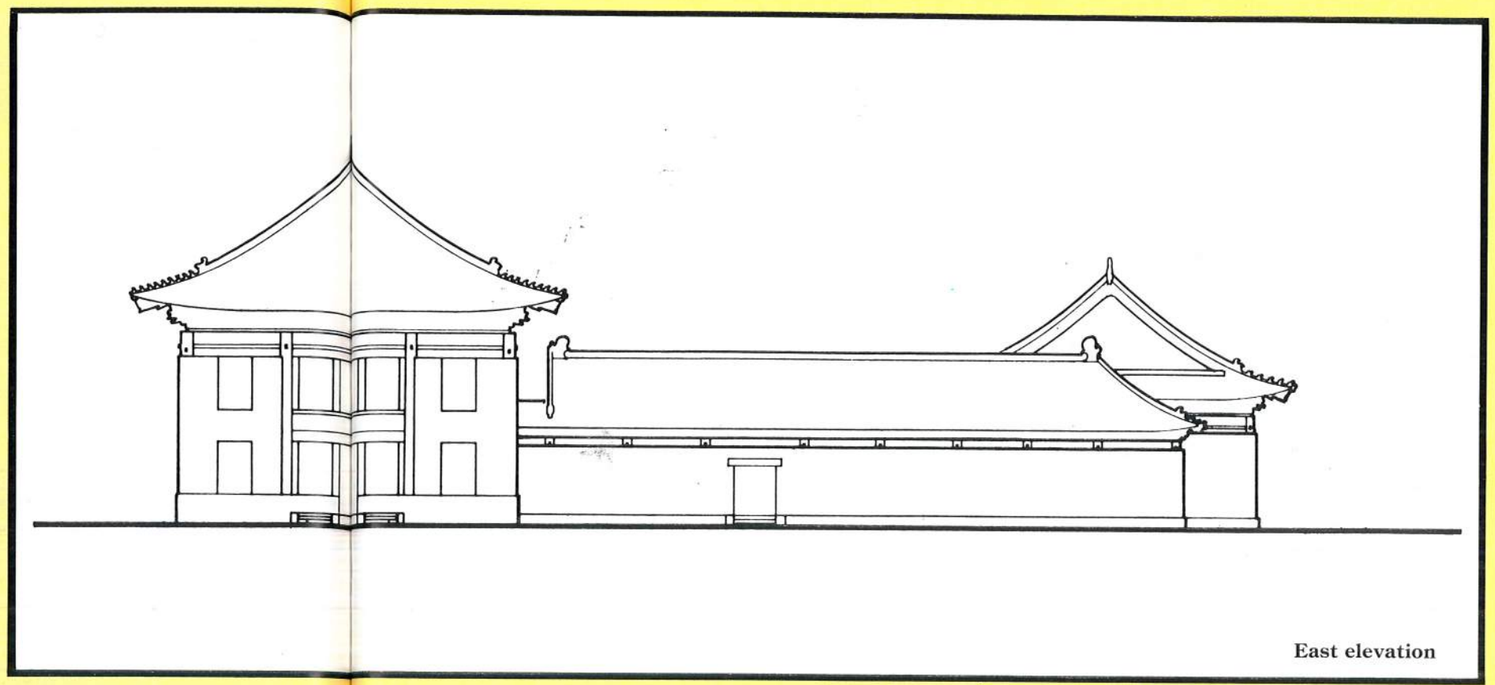


Photographs of a model of the Arthur M Sackler Museum of Art and Archaeology, Beijing University.

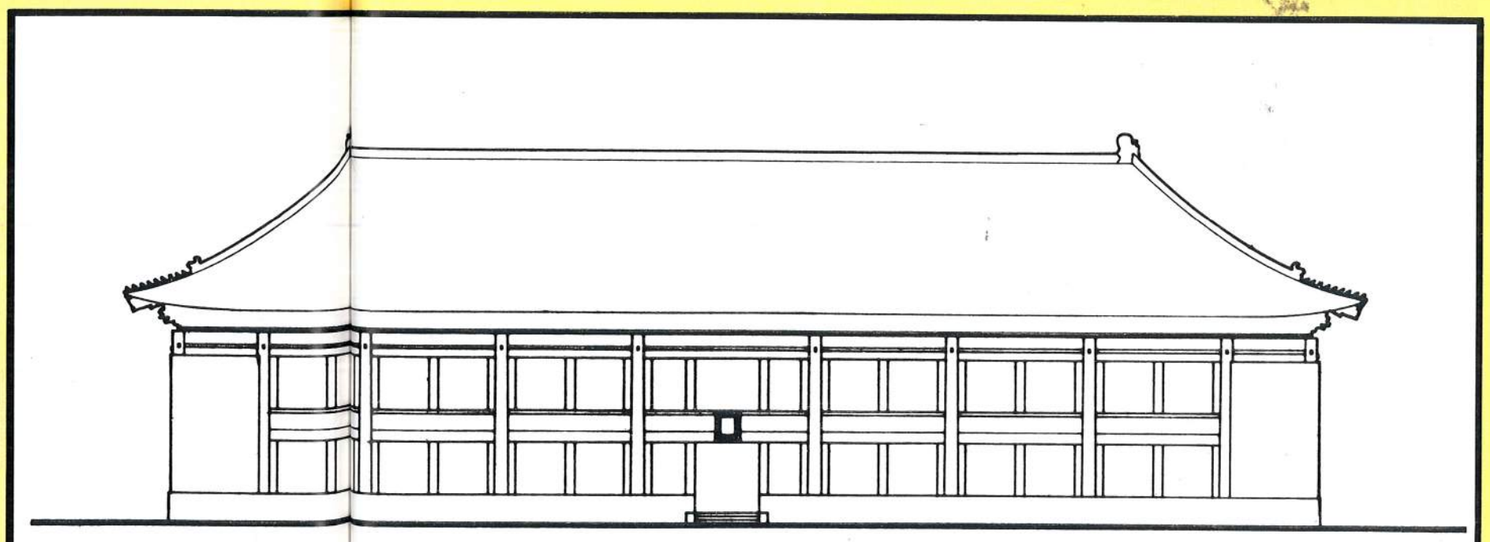
The groundbreaking ceremony. From left to right: Winston Lord (the US Ambassador), Jill Sackler, Dr Arthur Sackler, Dr Qiau Xiu-Zhong, Dr Ding Shisun (President, Beijing University), Curtis Cutter.

Lo-Yi Chan, the supervising architect for the Arthur M Sackler Museum of Art and Archaeology, Beijing University. Photograph Nancy Wasserman.

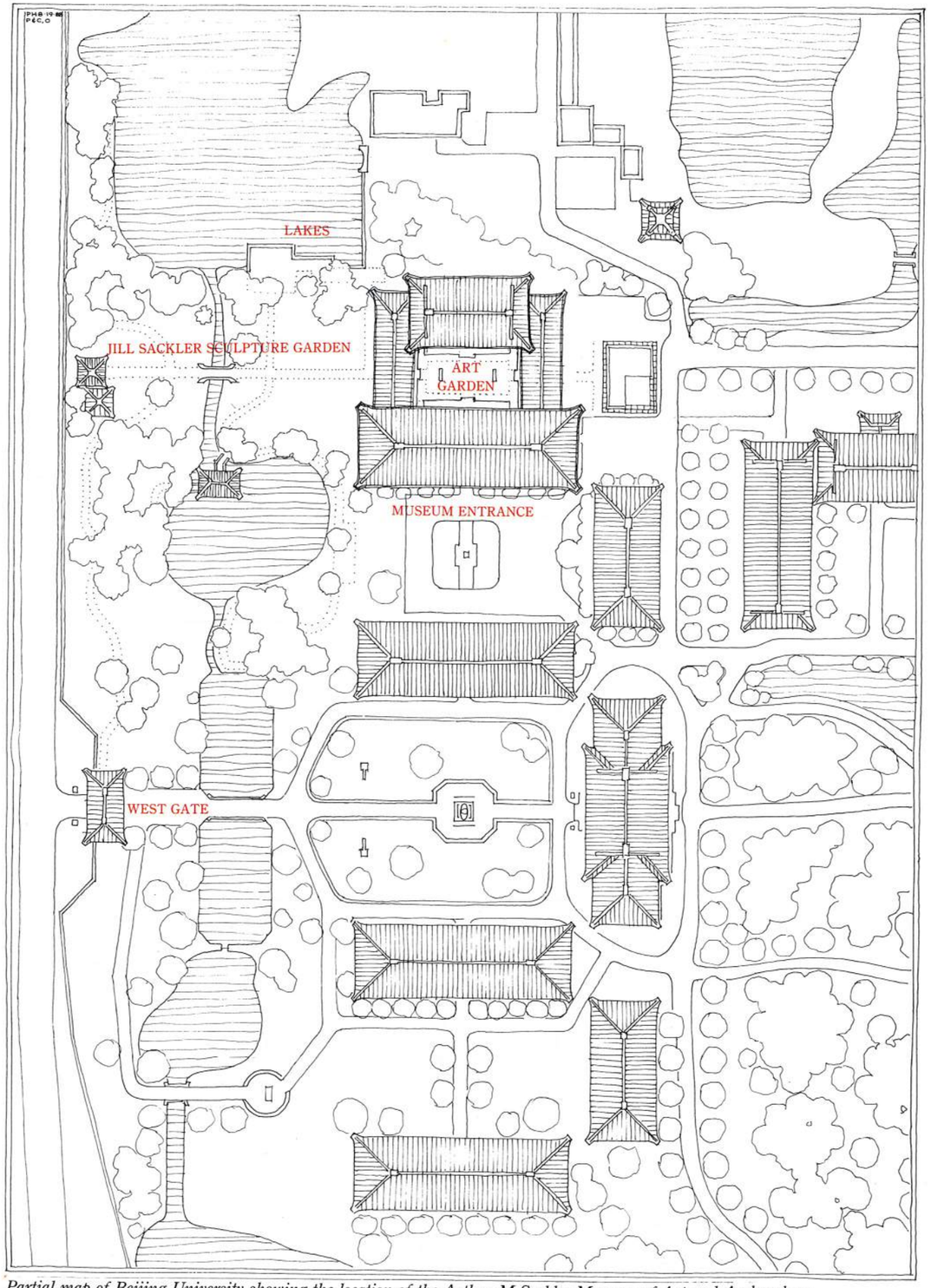




East elevation



South elevation



Partial map of Beijing University showing the location of the Arthur M Sackler Museum of Art and Archaeology.

IN MEMORY OF DR ARTHUR M SACKLER

Wen Zhong, Professor and Secretary General, Beijing University

While I was working on this article, my mind went back to those days when I was together with Dr Sackler in Beijing, in Boston and in Washington DC. He struck me then as a very amiable man. It was in the fall of 1986 in the lobby of the Great Wall Hotel that I saw Dr and Mrs Sackler off. I still remember how he got in the car and waved goodbye to me. I can hardly believe that that parting was to be the last time I saw him. I still remember Mrs Sackler wore a fresh flower, a flower we presented to her at the groundbreaking ceremony held on 8th September at Beijing University for the 'Arthur M Sackler Museum of Art and Archaeology at Beijing University'. Today, I wish I could present an eternal flower from my heart to his tomb.

Fifty years ago, right after the outbreak of the war against the Japanese invaders, Dr Sackler raised money for and donated medicine to Norman Bethune, the noted doctor. He had kindly cherished a friendship with the Chinese people. He knew well traditional Chinese art and loved it very much. My friendship with him began in May 1984, when he sent Michael R Sonnenreich and Curtis C Cutter to Beijing to express his heartfelt wish for the founding of an art and archaeology museum at Beijing University. He said he would like to contribute a certain amount of money for the plan. He hoped that this future museum would achieve the level of world class museums as far as its management, equipment, and so on were concerned. He also thought that it should set a fine example for other Chinese museums and serve as a good training institute to cultivate archaeology and museum management personnel for Beijing University. Dr Sackler's decision to make a substantial contribution to the construction costs of the museum was conditioned by the fact that the University had been taking the lead in the field of China's archaeology and education. It enrolled graduate students of archaeology in the 1930s and set up a museum in the 1940s. In 1954, the Department of Archaeology was founded.

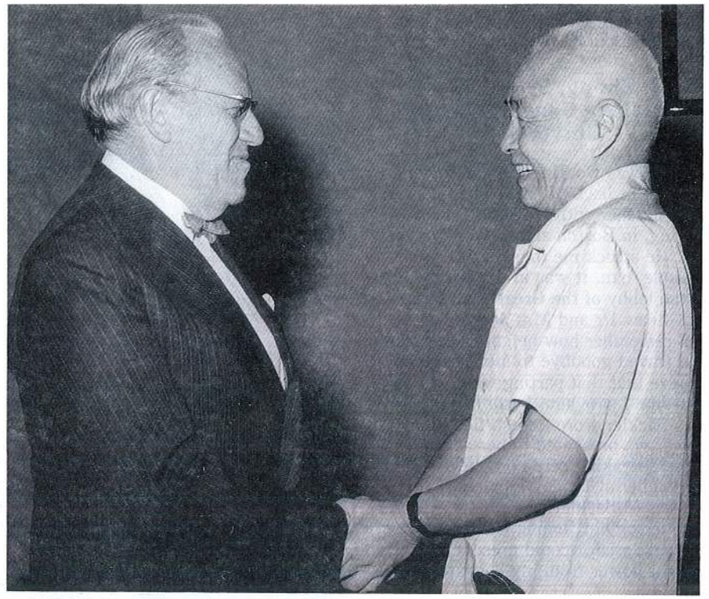
Dr and Mrs Sackler's donation to Beijing University will surely exert an important influence upon the development of China's archaeology and museum science. In response to Dr Sackler's kindness, we have chosen the most beautiful part of our campus as the location for the museum. We also decided that the style should conform to the other buildings around it, but that the interior should be designed to meet the needs of a modern museum.

Recommended by the Sackler Foundation, Mr Lo-Yi Chan from Prentice & Chan, Ohlhausen will be the architect of the museum in collaboration with the building agency of Beijing University. The original design has undergone substantial improvement through consultations between the designers on both sides. The planned museum is supposed to possess an exhibition hall of over one thousand square metres, research rooms, academic halls and so on. According to the agreement, the completion of the building is expected to be in 1990.

With a history of scores of years, the Department of Archaeology has a rich store of cultural relics including the Jinniu Shan Homo Erectus excavated by the Department which is 280,000 years old, the Coastal Neolith of Shandong Province and some cultural relics of the Shang (sixteenth to eleventh century BC) and Zhou (twenty-second to eleventh century BC) dynasties. The birth of the Sackler Museum at Beijing University promises a public exhibition of those precious cultural findings. And, in accordance with Dr Sackler's view, the future museum will become a convenient place to promote an exchange with the various museums of the world. The museum will become an important element in the academic life of this University and will also contribute greatly to China's archaeology and museum management. We shall exert all our efforts to realise these ideas, and I believe this is the best way to preserve the memory of Dr Sackler. ●

TO BE THE NORMAN BETHUNE OF THE DAY

**Dr Qian Xinzhong,
Former Minister of Public Health of the People's Republic of China**



Dr Qian Xinzhong (right) greets Dr Sackler.

On the occasion of the first anniversary of the death of Dr Arthur M Sackler, a good friend of mine and of the Chinese people, I cannot resist the recollection of the friendly sentiment between us, and of the common goal that we shared together for the attainment of peace, health, happiness, and civilisation in the world.

Dr Sackler sent me a most ebullient letter, in February 1987, the year in which he left us forever. He expressed the wish in the letter that I could join him in a project to share China's experiences in health services with the developing world. Both the World Health Organisation and a number of well-known scientists had responded favourably to the proposed project, and my trip at the earliest possible date was the only thing he waited for. Regretfully, however, his life was taken away by illness in May last year. The sad news has shocked me and I have realised that a most intimate friend of mine is gone forever.

I had his image and spirit in my mind when I attended the opening ceremonies of the Arthur M Sackler Gallery in Washington DC. I was overwhelmed with sadness whenever his name was mentioned or his wish for a bright future of mankind was referred to. While writing this article, I can hardly find words to express my feelings to the full. As Li Bai, the famous Chinese poet of the Tang dynasty (618-907 AD) put it: 'With our longed-for career unfulfilled, to me, personal gains and losses have become meaningless.'

Dr Arthur M Sackler was a friendly personage of the United States, an old friend of the Chinese people. When China was involved in her struggle against the Japanese invasion (1937-1945), he showed his good concern for this country by making a donation to support the medical team to China led by Dr Norman Bethune of Canada.

When I visited the United States in June 1980, I was introduced to Dr Sackler by the Chinese Ambassador to the United States. We had cordial and friendly talks, in which he expressed his warm feeling towards China's modernisation, her scientific and technological development and manpower training. At the dinner party held that evening, he said exuberantly that he loved China dearly since China is the ancient country where human civilisation originated, and that he was willing to be the 'Dr Norman Bethune of the day' by making due contribution to the country that had all his admiration.

Dr Sackler was a knowledgeable scholar as well as a famous antique collector. He was proud of having collected the jade and bronze pieces of the Shang dynasty (sixteenth to eleventh centuries BC) as well as classical paintings and furniture from different dynasties. We were taken to the Metropolitan Museum of Art in New York to visit his exhibition galleries, where some archaeologists were working to classify the antiques. Dr Sackler spent four hours there giving us a thorough introduction to the articles on display. He told me proudly that the Chu silk manuscript was the most precious of the objects he had collected. It was said that Mr Richard Nixon offered to buy it for thirty million dollars, but was declined. Dr Sackler said, however, that he was prepared to return it to the Chinese people in due course.

During his visit to China in August 1980, he presented to the Palace Museum in Beijing a throne which was reputed to belong to Emperor Qianlung of the Qing dynasty (1644–1911), and for which special arrangements for packaging and transportation had been so thoughtfully made by Dr Sackler before his trip to China. (The throne proved to be real, and Dr Sackler has established a very close relationship with archaeologists of China.)

In the interests of friendly co-operation with China, Dr Sackler stressed the importance of training activities, particularly the training of professionals who can bring forth cost-effective benefits. He emphasised also the training of senior pharmaceutical workers (who excelled in the English language). He thought that China's pharmaceutical products could thus enter gradually into the international market which would bring more hard currency to us, which would in turn be helpful to the international exchange, promote health services, and help the modernisation of this country. He expressed the wish that the pace for co-operation activities be accelerated.

Dr Sackler died in May 1987 from a sudden heart attack. However, in my heart I am still pondering over his sincere and thoughtful words that 'the way of doing things in China is too slow, and time has become less and less for me to work more for China'.

The Chinese people have lost a good friend and I lost the one with whom I could talk on the development of sciences and the protection of people's health. His warm feeling towards China will be everlasting.

The co-operation of this country with Dr Sackler is short in time. However, he made every effort to promote friendship between the peoples of this country and the United States. He was the first Chairman of the US side of the Committee of Beijing–New York Friendship.

Under his sponsorship, the First International Symposium on Nutrition was held in Tianjin in 1981. It provided an opportunity for Chinese scientists to meet a group of internationally known scientists including Professor Linus Pauling, twice a Nobel Prize winner. The symposium turned out to be an occasion to promote friendship and a forum to conduct scientific exchange which was very helpful to the further development of nutrition sciences in this country.

The newspaper *China Medical Tribune* has been published since 1983 with Dr Sackler's financial support. He provided information on medical sciences around the world which made the *Tribune* widely appreciated by the medical profession in China. It acts as a medium for the exchange of information on medical and technological development between this country and the outside world. It coincides with the aims set forth by Dr Sackler in 1960 for the publication of the American *Medical Tribune.* The *Tribune* is now published in seven languages, other than the Chinese language, and distributed in over twenty countries with more than one million readers. At a time when science and technology are rapidly developing, it is only natural for the *Medical Tribune* to become popular.

Dr Sackler helped *China Medical Tribune* set up an award system for three medical doctors selected annually, to whom a medal and a prize are granted, together with a stipend for the winners to take a study tour abroad. The system has encouraged the clinical workers of this country to further improve their expertise and the quality of their performance.

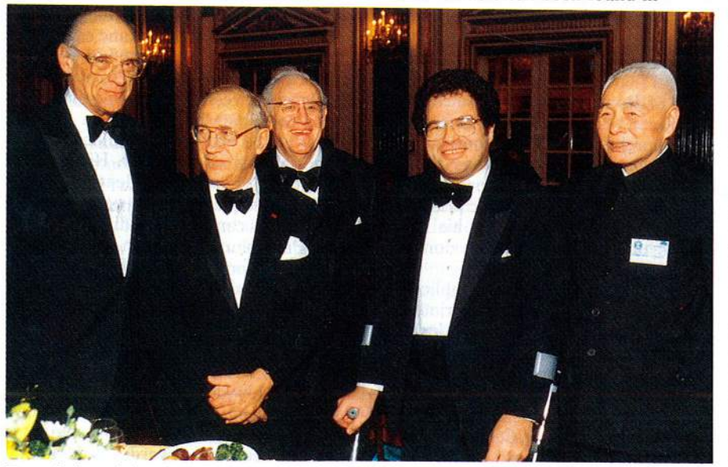
Dr Sackler made his last visit to China in September 1986, attending a signing ceremony held by Beijing University and laying the cornerstone for the construction of a most up-to-date archaeological museum which he donated to the University.

Dr Sackler was energetic, open-minded and magnanimous, enjoying high prestige in the collection of antique and art pieces, in natural and human sciences, and in social and public activities.

Dr Sackler studied art history, British drama, painting and sculpture, and then went on to read medicine on a work-study programme, graduating in 1937 from the Medical College of New York University. With the accomplishments in his career, he set up the Arthur M Sackler Foundation for the Arts, Sciences and Humanities. It was with foresight and sagacity that he enthusiastically made financial inputs into those fields.

A Medical Tribune network has been set up for the worldwide exchange and dissemination of medical and technological information for the benefit of patients and the medical profession. Also the Arthur M Sackler Center for Health Communications has been established at Tufts University, Boston. Using the most up-to-date facilities, data, information and literature have been summarised and stored for the benefit of patients, teachers, students and research workers. The Center has maintained very close contacts with other medical institutions in the world, including the recently built library of the Beijing University of Medical Sciences.

Dr Sackler was enthusiastically involved in funding activities in the fields of the arts and human sciences. His name has often been found in schools and museums. For instance, at the Metropolitan Museum of Art in New York, there is a Sackler Gallery where the remains of the Temple of Dendur of ancient Egypt have been placed. A museum is named after Dr Sackler at Harvard University where ancient art pieces from Asia, the Middle East and the Mediterranean are on display. And again, the Arthur M Sackler Gallery of the Asian arts was established at the Smithsonian Institution, Washington DC, in September 1987. I had the pleasure of being invited to the inauguration of the Museum, which is, in itself, an example of the grand and magnificent style of Asian architecture. The Museum contains more than one thousand three hundred pieces of ancient Chinese art collected by Dr Sackler.



From left to right: Arthur Miller, Jean Mayer, Dr Arthur Sackler, Itzhak Perlman, Dr Qian Xinzhong.

Dr Sackler was much interested in research into the biomedical sciences and was actively involved in funding such research. He helped to establish the Institute of Pharmacology and the Clinical Laboratory at Long Island, New York State; the Sciences Center of Clark University; the Institute of Biomedical Sciences of Tufts University and of the New York University; and the Sackler Medical College at Tel Aviv University.

Dr Sackler was sensitive in his thinking, wide-ranging in his interests and full of creative initiatives. In my talks with him in February 1986 when attending the inauguration ceremony of the Arthur M Sackler Center for Health Communications at Tufts University, Boston, he expressed the wish to help set up a Sackler University in China. According to his wish, this proposed university would be an international centre for the exchange of knowledge in science and technology. He told me also of his readiness to provide financial support for the establishment of a medical association for the developing world, which would conduct manpower training and promote academic exchange among developing countries, and introduce China's experiences in the health field to them.

Dr Sackler took all the time a looking forward attitude and never stopped at what had been accomplished. He was an enlightened personage who loved China ardently. Should he not have left us so soon, I am convinced that he could have realised, with the powerful support of the Sackler Foundation, his wish of being the Dr Norman Bethune of the day, and contributed even more to the promotion of friendship between the peoples of China and the United States. I am equally convinced that his spirit will certainly be carried on by his kinsfolk and the existing friendship between us will certainly continue. ●

DR SACKLER AND THE EDINBURGH FESTIVAL

'Will you celebrate your birthday at the Edinburgh Festival this summer as usual?' I asked Dr Sackler chirpily the last time I saw him. His arrival in Edinburgh for the Festival opera, theatre and exhibition was as regular as clockwork. It never occurred to me that this would not continue; that the spry, youthful figure opposite would not go on working, travelling and enthusing indefinitely.

His death came as a complete shock. Dr Sackler was sadly missed in Edinburgh this August. While he is recognised for his remarkable generosity in funding large-scale projects like the Arthur M Sackler Museum at Harvard University, and the Arthur M Sackler Gallery at the Smithsonian Institution, Washington DC, his considerable contribution to the Edinburgh International Festival is less widely known. I was not in any way officially involved with this, but I have many happy personal memories of his genuine encouragement to galleries like the Richard Demarco Gallery and the Edinburgh City Art Centre and the part he played in enabling major exhibitions like the *Treasures of the Smithsonian Institution* to appear at the Festival. In addition, he spoke widely and frankly at both Demarco Festival Conferences, in 1983 and 1984, on 'Art in the twenty-first century' and 'Art and the human environment'.

The first eye-opener was the Piranesi exhibition in 1982. It was held at the Edinburgh City Art Centre in co-operation with the Avery Library, Columbia University, New York (to whom the Sackler Collection of Piranesi Drawings and Etchings was presented as a gift) and the Demarco Gallery. (Demarco had first met Dr Sackler in 1980 in Dublin where Dr Sackler was the first recipient of the ROSC Medal of the Republic of Ireland.) The exhibition included twenty-three magnificent presentation drawings which were Piranesi's plans for submission to Pope Clement XIII for the expansion of Rome's ancient Basilica of San Giovanni, one of the oldest, most important churches in Christendom. Also featured were selections from the nine volumes of etchings, among them his awesome visions of fantastic prisons, the *Carceri,* plus sixty-two of his Roman views on which he worked during his entire life.

The accompanying three publications, beautiful, and immaculately printed and presented (I still have them), include a foreword by Dr Sackler which focused on Piranesi's achievements in relation to modern man: 'For centuries he opened men's minds to the vistas that his imagination explored . . . *Carceri* was more prophecy than phantasy . . . Piranesi, in his day, redressed the proportions of Western man in a prophetic anticipation of modern man's spiritual as well as physical imprisonment in the steel and stone, in the grinding stresses of the Industrial Revolution that was to come.'

The following year Dr Sackler himself addressed the same subject when he was one of the guest speakers (and a constant full-time attender) alongside curators, architects and artists from all over the globe, at the Demarco Conference. His opening challenge 'In the twenty-first century will there be art to house?' tackled the problems of today and tomorrow; the students and scholars who should, he advocated, work with culture to build bridges between different countries; to span hostilities by sharing an appreciation of the arts, be they music, porcelain, painting or whatever. His belief in the power of art was evident to all.

In subsequent years other Sackler exhibitions came to the Edinburgh Festival: Pre-Columbian Art in 1983; in 1984 the Smithsonian at the Royal Scottish Museum and wonderful Chinese watercolours in the splendid neoclassical Playfair setting of Edinburgh University's Upper Library Hall. Symptomatic of Dr Sackler's views on sharing his collections worldwide was the fact that the one hundred and forty-three rare Chinese brush drawings dating from the fourteenth century onwards had already circulated in the United States, to Jerusalem, Dublin and were to go on to the

Frontispiece for Vedute di Roma *(Catalogue no. 31[2]). Etching on paper by Giovanni Battista Piranesi. Late 1740s. Height 56 cm, width 80.5 cm. Gift of Arthur M Sackler, Avery Architectural Library, Columbia University.*

Fitzwilliam Museum in Cambridge. The collection's unique strength lay in a group of eighty works by Tao-chi, acknowledged as China's leading seventeenth-century artist. Tao-chi, the grandnephew of an imperial Ming prince, led a very nomadic life after his father's claim to the throne was defeated in 1645. His decades of roaming across China travelling 'ten thousand miles storing up scenic wonders in my breast' earned him a name as aristocratic 'wild mountain man', an individual painter. It was not until the nineteenth century that his greatness was recognised and his exquisite freehand ink studies (where one full brush stroke can define a strong bamboo stalk, soft paeony petals or misty mountain peaks) were finally appreciated.

About this time Dr Sackler, himself Polish-Jewish, was busy helping keep Demarco on an even footing, assisting with the purchase of an entire collection of Polish paintings for Tufts University, Boston, subsequently exhibited by Demarco at the International Contemporary Arts Fair, London, and co-operating with Count Panza di Buimo and Demarco on plans, sadly abortive, for Scotland to welcome a major collection of mid-twentieth-century art (now residing at the Museum of Contemporary Art, Los Angeles!).

On the occasion of the inauguration of the Arthur M Sackler Museum at Harvard University, Dr Sackler published an account of his philosophy, vis-à-vis art and life, in the University magazine. Plainly put, it set out his belief in public service, public duty and his conviction that well-educated young people with a knowledge and appreciation of 'the beautiful fruits of a creative imagination' would, in an apolitical atmosphere, 'be able to benefit from the exchange of ideas between cultures'.

His daughter, Denise, carried out just such a project when she came to Mellerstain, the home of Lord and Lady Binning in Berwickshire, to make a mile-long waterfall sculpture installation on a nearby hillside.

Interestingly this multi-millionaire scientist-turned-art-patron drove himself extremely hard, far harder than he drove his staff. He will be immortalised in the States as one of America's top art benefactors. In Scotland, he will be remembered as someone who enjoyed his visits to Edinburgh and its Festival and who communicated this relish to everyone he met — including me!

But hopefully the Sackler-Edinburgh Festival connection will not end there. His wife, Jill, plans to continue the association. Furthermore, Richard Demarco is planning a memorial to Dr Sackler. He told me: 'He was a force to be reckoned with. His was the largest single act of patronage ever to the Edinburgh Festival. In the last five years he and Jill gave it their whole-hearted commitment. His spirit is still with us.' ●

CLARE HENRY

MUSEUMS: caves, cathedrals and complexes — all a bridge between peoples

Dr Arthur Sackler was an enthusiastic participant in the Edinburgh Festival. In the following speech, which was presented at the Edinburgh Festival Symposium on 19th August, 1983, Dr Sackler discourses on the history of the museum and its role in the future, and expounds his theory of the 'critical cultural mass'.

Homo sapiens' cultural roots reach into the evolutionary past, scores or hundreds of millennia. Since culture encompasses all manifestations of the arts, all aspects of science and the humanities, we must be prepared to acknowledge that manlike Palaeolithic primates some 500,000 years ago may have chanced upon pleasing forms struck from wood or stone by their stone implements.

Much later, only some 50,000 years ago, fire was added to the early technologies. Fire and axe joined to an aesthetic sense, an imaginative mind and more available time laid the basis for the culture of our species. Early caveman now had at his disposal a more mixed diet, and fur coverings, light and warmth, charcoal to draw and the instruments to sculpt. In respect to modern *Homo sapiens,* we finally have their earliest artifacts, our first Venuses, 30,000 years ago; and, some millennia later the great cave paintings, as at Lascaux, and then Altamira.

I do not know how many fewer neurones our early forebears had as compared to our one hundred billion, or how many fewer synapses than our one hundred and fifty billion but, clearly, they had evolved a neurologic apparatus adequate to develop instruments for more than hunting and defence.

Needless to say, the hunter could not survive without the visual competence to clearly discern what was happening about him, and the musculoskeletal coordination to do something about these events. It would be remarkable if such evolved, intelligent primates were unimpressed by the ritual performances of mating rites of the many species about them — the calls, the songs, the mating dances. It would be remarkable if they did not note such things as the colourful gender plumage differences. And, it would be still more remarkable if they had no rituals or failed to adopt self-decoration and the use of sound and motion either for mating or other pursuits.

I must also register my impatience with the assumption implicit in the term 'primitive', to wit, the pejorative implication that our arts are superior to that of earlier man. For me, there is nothing primitive in Lascaux or in Altamira. Yet, I seem unable to convey my conviction that, compared to us, the average among Palaeolithic adults had to be smarter, healthier, with better reflexes, or they never would have reached adulthood. The few millennia that separate us from these, our ancestors, were not adequate for significant physiological evolutionary changes; but the agricultural — and particularly our scientific — revolutions have dramatically altered humankind's medical history with mixed effects upon the intellectual competence and physical status of the average adult.

I must also confess an impatience with the rigid insistence that the Magdalenian or other prehistoric arts were solely ritualistic. This, despite my conviction that all art is an expression of man's faith. Although some caves of Dordogne, such as Lascaux, may have been a site of ritual, the presence of engravings and a few pieces of sculpture in other sites could speak to the possibility of aesthetic adornment of a cool, if not air-conditioned, habitat. I would also like to suggest a third, perhaps intriguing, alternative, to wit, that decorated places could have been the early 'museums' of man, or a comfortable spot where a group could gather in the presence of beauty, for non-religious social, planning or intellectual functions.

But whether clan meeting cave, home or holy places, human behaviour is such as to suggest that creativity was not restricted to the graphic or plastic arts but rather that these remnants are the only surviving residua of what could have been total environmental art such as later characterised religious institutions in Europe and the Orient and which for centuries housed so much of the arts of so many cultural horizons.

As I was pursuing my theory of the reciprocal interaction between all technologies and all culture, kindred colleagues were evolving a new theory, a new science of brain function. I had always admired their scientific contributions, even as I have personally enjoyed the intellectual probings of the authors of this new thesis, G M Edelman and V B Mountcastle. I believe that their concept, the group selection theory of higher brain function, will also prove to be the ultimate neurophysical substrate for my hypothesis of cultural evolution.

Equally pertinent is Gerry Edelman's favourite story which he tells in his exposition of the theory of selection: 'This has to do with the gentleman who had the paranoid delusion that his girl was seeing another suitor. He came home early to their apartment, searched everywhere in a fury of jealousy for the hypothetical suitor, and could not find him. On this hot summer night, still in his rage, he found himself at the back window of the apartment. He looked out at the fire escape below, and saw a man loosening his collar and wiping his brow. Flying into a greater rage, he lifted a very large refrigerator, fit it through the window, aimed it carefully, and dropped it on the man's head — whereupon he fell dead of exertion.

'The scene switches to Heaven. Three people are being admitted; Saint Peter tells them that they have fulfilled all the requirements but the last, which is to describe the nature of their deaths. The first man said, "Well, I thought there was some hanky-panky going on, so I came home early. I looked all over the place, and finally found this fellow (down there), and I must have had an adrenalin fit. I lifted a refrigerator I could not ordinarily lift, dropped it on his head, and must have had a heart attack." The second man said, "I don't know. It was a hot summer night, I stepped out onto the fire escape, loosened my collar and wiped my brow, and a refrigerator fell on my head." The third man said, "I don't know. I was just sitting in this refrigerator, minding my own business".'

Since I feel like the man in the refrigerator in that I was just peacefully collecting art and then woke up to find myself immersed in museums, I will say that the story also demonstrates the importance of perspective and points of view which I would like to address in respect to their structure and functions.

The Bridgeman Art Library

A 15,000-year-old painting from the cave of Altamira in Spain. Was Altamira one of mankind's earliest museums?

As we engage in our discussion of 'the housing of art in the twenty-first century', the first question that confronts us is what kind of museum?

We have an extensive range of antecedents, experience and exemplars. The Greek *mouseion* were temples dedicated to the work of the Muses, patron goddesses of the arts. Plato's Academy, organised as a sacred band, whose activities ranged rather widely, including humanistic writings, philosophy, social investigations and even mathematics, was housed in one. Aristotle's Lyceum held forth in a similar setting. In Alexandria, a research institute operated in conjunction with its illustrious library. Much later Rome, on the basis of prior precedent, set a pattern not dissimilar to the Louvre and other museums built from conquest. After King Pyrrhus was defeated, the Roman victor dedicated a temple to Hercules of the Muses for display of his loot — bronzes, marbles and other art treasures in gold and silver as well.

Subsequently, in the medieval and renaissance periods, the churches became the cultural institutions of the west, and in the east Buddhist temples and, later, mosques. In addition to the total environmental art of the great temples and cathedrals, magnificent collections of churchly and royal art and manuscripts were further enriched by the work of humanists and poets as well as scientists, astronomers and mathematicians. This was followed by the advent of great private collectors.

Dillon Ripley, in his book *The Sacred Grove,* recorded some of these developments with the insight of a man who heads America's greatest cultural complex, one incidently which owes its origins to the English chemist, minerologist and author of many scientific papers, James Smithson, a worthy son of the first Duke of Northumberland. The importance of scientists in relation to museums ranged from the physician and mathematician, who was so influential in Leonardo's life, through Sir Hans Sloane (President of the Royal College of Physicians and of the Royal Society) whose bequest of coins, fossils, manuscripts and pathologic specimens led to the establishment and the opening of the British Museum in 1753.

While I have given physicians pride of place, by professional courtesy, I think one of the most important developments in the museum field was the establishment in 1682 of the Ashmolean Museum at Oxford, the first university museum.

The Greek *museion,* the Alexandrian Library, the university museum at Oxford, and the British Museum provide us with prototypes in addressing my rhetorical question, 'What kind of museum?'

The proliferation of knowledge with the renaissance in the west led to specialisation, a specialisation which has come a long way since Leonardo's day and is now reflected in a wide range of different types of museums. The astronomy of the Greek Academy and of the earlier Stonehenge are presently the focus of our planetariums. I do not know why so many prefer to attribute these great megalithic monuments to the religious needs of Druids, and are reluctant to ascribe technical sophistication in astronomy to the state of the art of our scientific ancestors of 1500 or 1600 BC who built Stonehenge.

Specialisation continued to split the Muses so that the arts, dance, theatre, natural history, astronomy and science began to develop their own 'temples'. The inherent unity of culture, however, has never ceased to attempt to reassert itself. And, thus, even as the many facets of culture require different facilities and technologies, in our cultural establishments today there is an unease as a result of which music is heard once again in the pinacotheca, opera stars lecture in the auditoria of art museums, concerts and plays are an integral part of university curricula; at the same time, magnificent art exhibitions are featured in libraries. We are apparently now coming full cycle; the museums of our day present more than just pictorial and plastic aesthetic expressions as they encompass concerts, plays, movies and many of the other manifestations of the humanities and, indeed, of science as well.

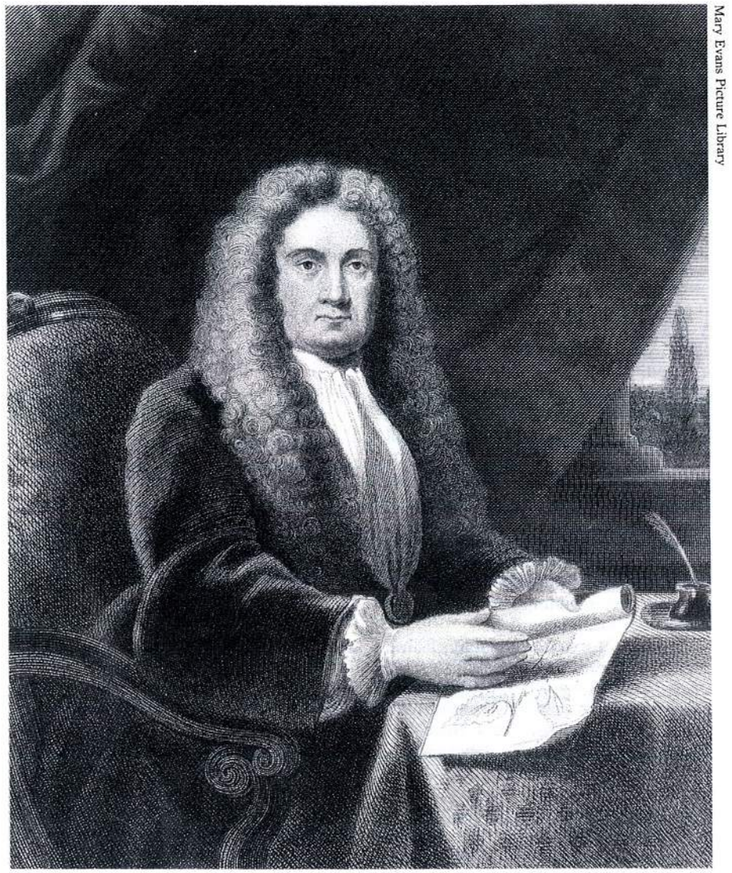
Culture, in the current sense, that is, art, science and the humanities, as well as educational institutions, is the *raison d'être* of a museum. Dillon Ripley wrote, 'Culture begets aesthetics. Aesthetics involves preservation and, more, conservation'. As I see the historic dialectic, I would say that aesthetics, science and technology beget culture which, in turn, furthers aesthetics. And, as Dillon Ripley never fails to point out, in respect to all of these the ultimate function of a museum is educational in service to society.

So wide is the range and so great are the needs that no one building can truly house a museum in the traditional sense. Only a complex such as the Smithsonian Institution, with museums ranging from galleries of European and American art to museums of natural history, of sculpture, of air and space, of zoos and, now (one of the subjects of this symposium), a new museum and gallery for the arts of Asia, the Pacific and Mediterranean basins.

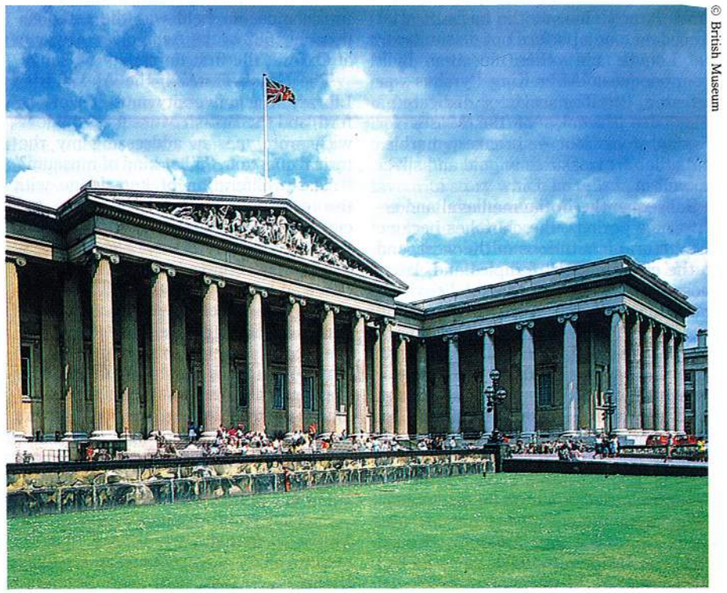
I cannot contribute as a specialist in museum planning. I can, however, comment on my experiences in respect to three types of art museums and the constructions and orientations relating to these three.

As to the Sackler Wing at the Metropolitan Museum, the functions were defined and the structure related to specific functions. One was to house a temple, the gift of the Egyptian people. The second was to house a research institute for Asiatic art. The third to provide a large major gallery for changing exhibitions. Fourth, to make available new and advanced galleries for study and storage. Fifth, to provide a large, restful monumental public space within the complex of the Metropolitan, opening it and linking it to the peaceful ambiance of the park outside. The sixth goal was to have the public space used for musical and other performances. Unfortunately, in the rush to completion, the acoustical plan was not fulfilled and no suitable lighting was put in place for performances other than nocturnal illumination of the temple, enabling a large section of the Sackler Wing to be seen from outside within the context of the fascinating skyline and the lights of the city of New York.

The Sackler Museum in Cambridge, the third of the Harvard art museums, was conceived as a university museum primarily for the enhancement of scholarship, the education of undergraduates, postgraduate training for art-historical and curatorial professions and conservation specialists. The problem was to relate the educational facilities to the arts and artifact exhibitions for constant and easy access of the scholars, while making the galleries readily available to the public. The solution was brilliant, simple and direct. A striking staircase both split and, at the same time, linked the office, technical facilities and library on one side to the gallery exhibition units on the other. The exhibition galleries are beautifully proportioned. A functional lecture hall will be situated below, and a connecting bridge is planned at an upper level for ease of communication with Harvard's Fogg Museum. Construction is proceeding rapidly along and, as best one can judge, the museum looks well on



Mary Evans Picture Library



© British Museum

Sir Hans Sloane (1660–1753), former President of the Royal College of Physicians and the Royal Society (above), made a bequest of coins, fossils, manuscripts and pathologic specimens which led to the establishment of the British Museum (right) in 1759.

ACE Photo Agency/Mike Shirley

The Ashmolean Museum in Oxford, founded in 1682, was the first university museum.

its way to fulfilling Ada Louise Huxtable's description of it as 'the architectural event of the 1980s'.

In Washington, on the Mall, the new Arthur M Sackler Gallery, for which ground has been broken, will be dedicated to another concept of culture which I fervently embrace. Its primary purpose will be to afford the opportunity for millions of Americans, who annually make pilgrimages to our capital, usually with their families, to observe the extent to which we, as a people, are organically linked to other peoples, both in time and in space. It is my hope, in presenting the manifestations of the cultures of the Pacific Basin, the Asiatic mainland (Japan, China, India) and the Middle East, Egypt and classical Greece and Rome, that this museum will serve that function which I believe to be the most important role for culture in the twenty-first century — the creation of bridges of understanding and mutual respect between peoples of different backgrounds regardless of faith, racial origin or political ideology. It is an imperative of our times to recognise that all the components of culture — art, science and the humanities — provide the most natural as well as the most fundamental spiritual, emotional and intellectual bridges of communication between peoples.

As to its structure, I have been asked how I feel about an underground museum. I have noted that it is particularly appropriate as a site for antiquities which have been preserved for centuries and millennia through the benevolence of our earth, safe from thoughtlessness and obsolescence, from the violence of changing environments and the depredations of man. There, on the Mall of our capital, in the good earth, under ideal controlled atmospheric humidity and ultraviolet conditions, insulated from noise, pollution and environmental distractions, millions of Americans and visitors to America can be exposed to and commune with the aesthetic messages from our common ancestors and can repose and contemplate in comfort the beauties and the great, good things of which peoples in different regions and times are capable.

There are reasons for the selection of these three different types of galleries and their locations. History has revealed that periods of glorious cultural flowering, as in the golden ages of Greece, China, India and Japan and the great classical peaks of Egypt, the Middle East and Rome, occur at discrete points in time and place which I find related to what I call the creation of a critical cultural mass. One of the ultimate expressions of the successful function of our museums and all our cultural institutions is to participate in making possible six of the essential elements (genius, material, technology, cross-fertilisation, patronage, appreciation) which, when concentrated in time and space can create the critical cultural mass, releasing a burst of creative energy for the enlightenment and enrichment of humankind; for the advancement of peace, and the spiritual and aesthetic fulfilment of all the peoples who constitute *Homo sapiens.* ●

Postscript

All culture is based on communication — from grunts to eloquence, from body language to ballet, from plumage to adornment, from whistles to wind instruments, from bow strings to string sections, and from charcoal embers to tempera and oils. Darwinian evolution and selection, based upon discrimination of the aesthetically pleasing or aesthetically challenging, finds a developmental process deeply rooted in our neurophysical and endocrine systems. Like all species, so to man. As ontogeny recapitulates phylogeny, so we hear our participants in the evolution of the museums, the cultural complexes of the twenty-first century. Complexes and institutions, artists and performers who, utilising the instrumentalities of our neurosensory apparatus and our inheritance of technologies and aesthetics, will communicate personal feelings and passions, ideas and intellectual challenges, knowledge and skills for their accumulation. All the efforts of artists, scientists and humanists must ultimately be used to link people to the goal of our millennial desire for the warmth and fruitfulness of peace, for the ultimate manifestation that all peoples of this world are literally, as well as phylogenetically, *Homo sapiens.*

Some reflections on the arts, sciences and humanities

In April 1986 Dr Arthur M Sackler was honoured by an invitation to present the Sir Run Run Shaw Distinguished Lecture at the New York State University, Stony Brook. The text of this speech is published here in full for the first time.

The arts, sciences and the humanities are manifestations of our neuroendocrine function. As such, all evidence characteristics in common even as each cultural category in particular exhibits distinctive differences. Ontogeny may set the substrata of the cultural sensitivities of an individual; societies reflect the evolution of different cultural horizons of the phylum.

As we approach the new millennium, we note that in just forty years realities of four billion years have been reversed by 180 degrees. All species depended upon our environment; today that environment is at the mercy of one species, *Homo sapiens.* The bonds of gravity, tying all species to earth, have been broken by one species. Natural fertility, as an essential for species survival, no longer rules as antifertility cults and test-tube babies become commonplaces. For the first time in four billion years, one species, which in its time has explored lands physically and inner space philosophically, can now non-invasively depict its own inner structures physically and physiologically, have vital organs replaced, and defer death with a plethora of mechanical systems. The regional character of communication of all species has been, for one species, converted into a virtually instantaneous globe-circling process. And, for the first time in four billion years, the dependence of all species on proximate biospheres need no longer rule for one — humankind.

Today, the critical precondition for survival of most of life on planet earth is a world at peace. Biologically, metabolic needs dictated the evolution of critical patterns for survival. Pre-eminent among these were reflexes and behaviour patterns essential for territoriality. These were requisite as long as metabolic needs, raw materials, security and other requirements were dictated by the amount and the immediate character of land, sea and air of a particular resident species — its biosphere. Survival mechanisms led to [the] evolution of aggressive and protection biologic patterns such as the territorial ,imperative. *Science* [I've noted] *defined the biologic evolutionary basis of aggression. Creativity in science and technology, rather than territoriality, may be the ruling imperative in the next millennium.*

For societal *Homo sapiens,* the territorial imperative had specific socio-economic substrata. Wars were fought for more fertile land, to enslave or obtain cheap labour, for raw materials to feed industrial societies and for energy sources.

As evolutionary processes dictated so much of global history, a series of other continuing revolutions were gathering speed. And, very recently, in the timescale of one species, these have gained an increasingly important role.

I've always detested belligerence and bellicosity. From my school-days on I have sought to contribute to the goal which Linus Pauling puts so succinctly, 'No more war'.

For the past several decades I have acted upon the conviction that the arts, sciences and humanities are the three bridges which transcend racial, ethnic, religious and national differences. These are paths to peace, to mutual respect and esteem, to the elimination of the intolerance and prejudices as causes of conflicts.

I cannot see a world at peace as long as the now archaic concepts of 'Lebensraum' and 'greater co-prosperity sphere' or commercial and nuclear rivalry prevail.

If my fundamental premises are correct, that all culture is physiologically based, and that all culture is the heritage of all humankind, where have we gone wrong?

Recognising the territorial and socio-economic substrata of wars, how was 'civilised man' led into waging wars, into fratricidal and suicidal ventures? The method was described in the song, 'You've got to be taught to hate'. If we can define the mechanisms of how we have been taught to hate, we may better arm for peace.

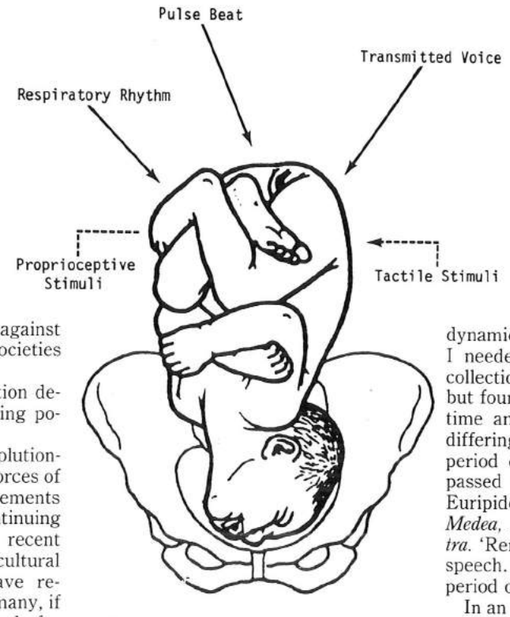
How is the normal, free curiosity of puppies, kittens or kids, usually enchanted by something or someone new, converted into hostility and fear? How are the beauties of distinctiveness of individuals distorted into prejudices and intolerance?

On another level, consider the joy of a scientist confronting a new, unexpected finding or an artist discovering a different plastic or graphic expression or a unique interpretation of an aria; or the poet, playwright or philosopher solving one of the dilemmas that human differences pose?

I find that conversion of natural, healthy impulses and appreciations into their opposites — joy to hate, friendship to hostility, curiosity to paranoia — is based upon a process utilised through the ages and today — polarisation.

The preservation of the cohesion of tribe in a hostile environment, and dependent upon its social solidarity for survival, was fostered by polarisation, through differences in dress, decor and rituals. The homogeneity of a race was propagated by depicting others as barbarians. The strengths of proselytising faiths were reinforced by polarisation, isolating 'heretics' and derogating 'infidels'. In manipulating states peoples were polarised with vile concepts such as inferior races, justifying the murder of millions in gas chambers and ovens by what had been one of the most civilised of nations.

I believe you will find in each instance cited the fundamental mechanism of polarisation was used to set tribe against



Sound and rhythm as well as tactile and proprioceptive stimuli constitute our earliest neurologic, sensory and social contacts.

tribe, race against race, faith against faith, nation against nation, societies against societies.

Today, the survival of civilisation depends upon stopping and reversing polarisation — on *depolarisation.*

Today, millennial biologic evolutionary processes are subject to the forces of the incredible technologic achievements of humankind's three great continuing and accelerating revolutions of recent centuries — the industrial, agricultural and scientific revolutions. I have remarked that these can eliminate many, if not most, of the evolutionary needs for the territorial imperative. We can at this time also note the powerful instruments they place at the disposal of the arts, sciences and the humanities for the depolarisation essential to the survival of all civilisations — the ability to achieve abundances, to remove the avarice of need, the capacity to alleviate the requirements of brute labour, to reduce dependence on raw materials such as copper and iron, to expand sources of energy. We witness an unparalleled explosion of related technologies — the development and deployment of electronic and fibre-optic communication, satellite relays, genetic engineering, silicon chips and computers. Even as past biologic and economic substrata for conflict are being reduced or eliminated, our abilities to transmit the messages and the transcending linkages of the arts, sciences and humanities are being multiplied and magnified.

I cannot resist the temptation at this time to observe that, many years ago, I was going to write a book on the three revolutions in which I wanted to bring out the fact that, contrary to a knee-jerk conclusion, the most toxic of the three is neither the industrial revolution nor, barring nuclear war, the scientific revolution. Presently most damaging and poisonous is the agricultural revolution which has made too readily accessible and available such toxins as alcohol and tobacco, heroin, cocaine and carbohydrates.

I have long sought to comprehend the dynamics of human creativity. Recently I needed a foreword for my maiolica collection. Its period of effloresence of but four-score years recalled the limited time and space of the golden ages of differing media and cultural horizons. A period of just seventeen years encompassed the masterpieces of Sophocles, Euripides and Aristophanes, including *Medea, Antigone, Oedipus Rex* and *Electra.* 'Renaissance man' is a daily term of speech. The School of Paris celebrates a period of creative glory.

In an exuberance which is not uncharacteristic, I elaborated to Robert Adams, Secretary of the Smithsonian, upon the sharp delineated peaks in cultural creativity and my hypothesis as to its causality, what I termed 'the critical cultural mass'. Bob sobered me with a reference to A L Kroeber's *Configurations of Culture Growth.* There, sure enough, was a magnificent explication of the clustering of genius and creativity. I would like to share with you Kroeber's reference to an observation, prior to his own, on this subject.

This earlier author who had noted the 'narrow space of time of great creations, the few years encompassing Aeschylus, Aristophanes, Sophocles and Euripides' likewise referred to an 'eighty-year period', the time-span I had used for the compass of great maiolica. I did enjoy his succinctness, as in his observation: *'A single city of Attica blossomed with more masterpieces of every kind of eloquence than all the rest of Greece together — to such a degree, in fact, that one would think that although the bodies of the Greek race were distributed among the other states, their intellects were confined within the walls of Athens alone'.* This author was Velleius Paterculus, writing 2000 years ago.

Was I crushed? No.

That still left me with my theory of 'the critical cultural mass', which I will leave for others to enlighten me as to whose ideas or intellectual property I may be unwittingly appropriating.

If one lives long enough, there is a reward in exposure to the intellectual

giants who came before and of masters of the mind of our day.

Among the many subjects Merton has explored have been the problems of priority in scientific discoveries and the concept of 'intellectual property rights'. He buttresses with a wealth of science history his observation that 'science is a social institution with a distinctive body of norms exerting moral authority'.

Upon reading this I was moved to write: 'Immortality in science is the personal identification of an individual with the identity of a corpus of knowledge which constitutes this social institution'.

I shall always be grateful to such men as Bob Merton and Gerald Holton, Bob Adams, Frank Press, Joshua Lederberg, Frank Yang and Linus Pauling, whose insights and sensitivities have strengthened me in my struggle to understand the forces driving cultural creativity.

For forty years I had been a Claude Bernardian. My initial deep immersion occurred after I had begun my first draft of a book on principles of research, only to find my ideas were not *de novo* but had been much more brilliantly explicated one hundred years before by a man who had also been born exactly one hundred years before my birth year, Claude Bernard. For years I had clung to the dictum, his quote, *Art c'est nous, science c'est moi* until I learned differently, for better or otherwise. Today I believe art and science are two sides of the same coin, science being a discipline pursued with passion and art a passion pursued with discipline. That experience, and the more recent one of the averted, unconscious 'plagiarism' of Kroeber and our 2000-year-old predecessor, Velleius, posed for me further problems as to certain common characteristics of culture.

For more than 2000 years, the love of wisdom, that is embodied in the Greek term 'philosophy', embraced all aspects of knowledge. Through the Middle Ages, as Robert McC Adams reported, 'the English word, science, encompassed the (liberal) sciences' and was 'often used synonymously with the seven liberal arts to cover all the formally constituted fields of learning: grammar, logic, rhetoric, arithmetic, music, geometry, and astronomy. Music and mathematics were still "these sciences" in Shakespeare's *Taming of the Shrew* . . . Only later, in the seventeenth century, did a contradistinction of science from art begin to emerge . . . Later still, well into the eighteenth century, science first came to designate a branch of study resting on an integrated body of observed regularities.' All these constitute culture, the highest expressions of our species.

Happily, we still honour learning and many branches of culture with the degree, Doctor of Philosophy. I say 'happily' because of my conviction that the core elements of every aspect of culture have, in addition to common characteristics, important reciprocal synergising linkages. I believe their interfacing, in the years ahead, is as inevitable as they will be significant to future progress of the sapient aspect of species *Homo.*

What is an initial and truly original innovative discovery? If these three sculptures are compared, which is more abstract or 'modern'? Top: Ram's Head. *Pablo Picasso. Bronze sculpture, single cast. From Galerie Louise Leiris, Paris. Certificate by Kahn Weiler. Centre: Ram's Head. Earthenware, China, Han dynasty (206 BC to AD 220). Length 25.4 cm, width 31.2 cm. Bottom: Vessel in the shape of a bull's head. Black burnished ware, Iran, possibly Ardebil, circa 1000 BC. Height 23.5 cm, depth 10.8 cm, length 13 cm.*

I have commented on an evolutionary biologic basis of aggressivity, as in the territorial imperative. Experimentally, I have also observed, first, the increase in aggressivity which occurs in isolation experiments (mice) and then how, biologically, permanent reduction in this aggressivity can occur.

There is a significant literature on the endocrine basis of aggressivity, as in reversals of pecking order in fowl. I have often put to the test in the laboratory conventional or folk wisdom. I have carried out what I call 'Grandma says' experiments. I did not, however, undertake to check out the common observation implicit in the figure of speech, 'Oh, he's been castrated', although I did go to the laboratory in 1972 when I read that 'one million [vasectomies] are expected in 1972 in the United States' as a routine form of contraception. These were based upon an assumption of a safe physical change without sacrifice of normal physiologic patterns. We began our report in *Science* (19th January, 1973) with the statement, 'Valid social ends do not justify invalid unscientific means'. We studied three groups of Wistar rats: one vasectomised, one vasoligated, and sham-operated controls. In vasectomised rats, testes appeared normal at autopsy in only ten out of thirty-one. There was a statistically significant decrease in testes weights, decrease in urinary androgen excretion and changes in white blood cell count. Yellowish cysts were found in accessory sex organs after vasectomy and vasoligation and some small yellow cysts were observed in a few in fatty tissue near the spleen, liver and lungs. Our paper led to a minor contretemps as an investigator challenged the validity of our caution. She then undertook a study which she reported five and a half years later, also in *Science.* This study of monkeys on high-cholesterol diets found that 'Diet-induced atherosclerosis developed more extensively in the vasectomized . . . [monkeys and was] most pronounced in the abdominal aortas, carotid arteries, distal segments of the coronary arteries, and intracranial cerebral arteries'. It thus appears that experimental vasectomy may be associated with reduction in androgen output, diminution in size of testes, and atherosclerosis, three findings probably not unrelated to the process of ageing.

Almost thirteen years after our vasectomy studies, *The New England Journal of Medicine* recently published a controlled study on thirty-one vasectomised men, recording significant morphologic changes in the human testes after vasectomy. The sparsity of data on both vasectomy and tubal ligation and the continued frequency of these operations places in sharp contrast the rapid spread of medical information in Jenner's day (1796) as contrasted with this, our age of instantaneous transmission of sight and sound and supposedly immediate communication.

I have begun these observations saying that the arts, sciences and the humanities are manifestations of our neuroendocrine function. At this time I could point to the relationship of mother love to the same underlying biologic substrate. The extent of aggressivity that could be induced by isolation was markedly reduced by the changes occurring after mating and production of litters in our experimental situation. The reality of mother love is closely linked to reduced aggressivity and neuroendocrine changes induced by pregnancy and parturition.

I have repeatedly spoken of passion as a common denominator to the creative process in the cultural manifestations of art, science and the humanities. I am not presenting here experimental evidence of the neuroendocrinologic basis of passion. I will, however, note that passion, combined with a large bittersweet component of pain and joy, have for me been essential elements in most processes of discovery.

In my exposure to the arts, I have found myself most moved when I feel closest to the impulse which I believe impelled the artist to communicate his feelings, as in terra-cottas, oil sketches, Chinese painting and calligraphy.

The most central element common to all culture is, I believe, communication, whether it be the communication of facts or forms, of sounds or ideas, and the beginnings of communication sounds, touch, rhythm and social contact begin *in utero.* All culture constitutes social interchange though, heaven knows, all social interchange does not constitute culture. All culture is technologically and reciprocally inter-related. Without fire, charcoal and pigments, there would be no paintings in the caves of the Dordogne nor in Altamira. Without woodworking and metallurgy, there would be no symphonies; without chemistry and electronics, no cinematography nor art of the moving image. All culture constitutes social manifestations encompassing ideas and forms imbued with passion and shaped with discipline.

Communication is, for me, the *primum movens* of all culture. In the arts, paintings and sculpture, music and dance, I find the emotional component most moving. In science, it is the intellectual content. Both are deeply interlinked in the humanities. In the act of creation in all three, I believe passionate commitment is the common driving force.

Today I believe art and science are two sides of the same coin, science being a discipline pursued with passion and art a passion pursued with discipline.

I had noted, however, a rather unusual difference between the arts and the sciences. Even as I have always thought of myself as a visually oriented persona, I was struck by the fact that a great musical or ballet performance could reduce me to tears but that even the most awesome greatness in a painting or sculpture never either elevated or reduced me to that intensity of emotional reaction.

How could this be?

I have come to believe that sound and rhythm are among the most primal stimuli because of our ontogeny. *In utero,* as early as the blastula stage, the forming organism and its subsequently invaginated ectodermal neurologic beginnings and the later-developing fetus floating in the amniotic fluid are exposed to the rhythmic beat of the aortic pulse, the superimposed thrust of respiratory movements through the diaphragm and, later, the transmission of sound through soft tissues and amniotic fluid. Sound and rhythm as well as tactile and proprioceptive stimuli constitute our earliest neurologic, sensory and social contacts.

I was probably unconsciously predisposed to the embryologic basis of aesthetic emotionality because of our experiments on the neuroendocrine effects of sound into which we originally ventured in an effort to obtain quantifiable stress stimuli (in our studies, decibels, pitch and duration) in the presence of varying situations.

Our audiogenic studies for quantitating stress were not fruitless 'wanderings in the desert'. Among the consequences I also became involved in what I have referred to as common unrecognised variables in biologic experiments (noise and vibration levels, number of animals per cage, duration of study, the handling of mature as well as young experimental animals, sex and age differences, etc) with fascinating findings on growth, resistance and immune system changes.

Merton has observed that: *'in the institution of science originality is at a premium, for it is through originality, in greater or smaller increments, that knowledge advances'.*

How do we discern in all aspects of culture, the arts, sciences and the humanities
(a) what is an initial and truly original innovative discovery,
(b) which relates to cultural diffusion,
(c) which is an independent rediscovery, and
(d) how many are independent or simultaneous co-discoveries?

One of the great original discoveries, with diffuse and manifold influences on science, technology and the arts, has been the wheel. From earlier use for locomotion, pottery, drilling, sawing, this discovery is today almost omnipres-

ent in our civilisation at the most advanced edges of discovery.

Picasso was not one to hide the origins of many of his inspirations, being outspoken in appreciation of African sculpture. I also recall Alice Toklas telling me that when, during World War Two, Picasso and Gertrude Stein saw camouflaged tanks in the streets of Paris, Picasso commented to Stein that the military got that idea from some of his early Spanish landscapes. I believe he gave too much credit to the military.

There are many interesting exhibits of independent rediscoveries in painting. I don't believe Cézanne, in this oil sketch of Mont St Victoire [illustrated], was cognisant of the earlier efforts of depiction of mass by Cha Shih-piao who painted these mountains some 300 years earlier. Nor do I think Signac or Seurat was familiar with the pointillist solutions utilised by Fan Ch'i as in album leaves of three centuries ago. And for those who rightfully enjoy both Franz Kline and Robert Motherwell, I would suggest an excursion into the glorious continuum of great Chinese calligraphers.

As to classic examples of independent or simultaneous co-discoveries, we have Darwin and Wallace for evolution, and Newton and Leibniz for the invention of the calculus.

Robert K Merton, in his essay 'Priorities in Scientific Discovery',† wrote of one of the greatest *'cases of* noblesse oblige *in the history of science, when Darwin and Wallace tried to outdo one another in giving credit to the other for what each had separately worked out. Fifty years after the event, Wallace was still insisting upon the contrast between his own hurried work, written within a week after the great idea came to him, and Darwin's work, based on twenty years of collecting evidence!'*

Originality, a focus of priority in science, also marks the greatness of individual artists, composers and choreographers, painters and sculptors, and weathers the erosion of time. The fundamental aesthetics of the great temples and sculpture of ancient Egypt, Greece and India inspire over the millennia. The arts and humanities march at a different pace than science. The Old Testament Psalms remain ever moving. The great Greek tragedies continue to tell of eternal truths, and Shakespeare's plays, despite his borrowings from the Hollingshed (and other) Chronicles, remain ever green. The arts and the humanities appear to me to be more closely linked to our neuroendocrine system and our basic aesthetics which do not significantly change over mere scores of millennia. Great achievements in the arts and humanities are not as fixed in time as are science and technology which are linked to higher neurologic centres, which are sequential and cumulative in character, and whose rate of change is accelerating as new findings almost daily reveal unexpected insights and open broader vistas.

Even as I have dabbled in the arts, sciences and the humanities, my first love has been the sciences.

My studies usually started with clinical manifestations. My concept of disease is that of a massive testing, of myriad trials and errors, operating with numerous uncontrolled variables within what some would call the designs of nature. As a clinician with scientific pretensions, I passionately embraced Pasteur's: 'No, a thousand times no, there is no category of science which can be called applied science. There is only science and the application of science, related to each other as the fruit is related to the tree that bore it.'

Even as I have dabbled in the arts, sciences and the humanities, my first love has been the sciences.

Our first experimental approach to the psychoses was based upon a few simple observations. First and foremost, psychotic patients can and do spontaneously recover. The recovery mechanism or the correction of pathophysiology was apparently based on endogenous factors as patients improved in 'snake pit' as well as they did in optimal hospital environments. Psychotic patients' reactions to barometric pressure changes with increased agitation were noted. Dynamic psychotherapy left almost all psychotics unaltered. We found it necessary to reconcile and reported how neuroendocrine effects were successful with diverse procedures such as insulin therapies, in smaller numbers of patients with thyroid, and even with such somatic therapies as electric shock which could be operative biochemically and might be endocrinologically replicated.

Our observations of thyroid pathology in the mothers of childhood schizophrenics, autistic children, the improved prognosis with longer duration of illness and recovery of childhood schizophrenics at the onset of puberty then led us deeper into the possible participation of gonadal hormones as well as those of the thyroid and thymus gland in psychotic disorders. Counterproof with extirpation experiments revealed sex differences in thyroid function and a physiologic role of the thymus and possibly spleen in adrenocortical balances. Our findings led us to suggest that control of physiologic parameters should be viewed, not from the perspective of homoeostasis, but rather within the context of ever-changing equilibrations operating over the widest ranges of time patterns from milliseconds to months based on the functions being regulated.

By 1950, to make order out of our findings, we had to create a range of postulates. Among them were the differentiations between absolute concentration of the endocrine output of a gland, relative concentration resulting from antidyne effects of other hormones, and operative concentration which we defined as the result of operative concentration and *end-organ sensitivity* — precursor to what is now universally recognised in the all-important concept of receptor sites.

During our search for physiologic differences, a chance observation led to finding of changes in the clotting of the blood of psychotics, which we quantitated, utilising equipment for monitoring changing viscosities in oil-cracking processes. This report was one of the earliest, if not the first, use of ultrasound in medical diagnosis which we named ultrasonometry *(Journal of Clinical and Experimental Psychopathology,* Vol XII, No 4, October-December, 1951).

It was at an American Psychiatric Association round table in May 1950, after we presented a series of papers, that I was moved to conclude in respect to the varying findings in schizophrenia previously considered unrelated, that we were 'like the blind men and the elephant'. The man at the tail says it is a rope; one with his arm around a leg thinks it is like a tree trunk; the third talks of the smooth, pointed tusks, and the fourth of a flexible tube. We proposed it was an elephant and that we had found, through common denominators of different therapies and experiments, what we believed to be an integrated neuroendocrine basis for psychoses. You may believe me that in 1950 this was heresy of the highest order. Today, more than forty years after our studies of the psychoses and experimental medicine started, we find ourselves again in a relatively unexplored 'wilderness' of metabolic disorders with fascinating neuroendocrinologic and other metabolic linkages. I believe body economies are maintained through multiple back-up systems whose compensatory effects defer clinical manifestations which finally appear only after one or more back-up systems, as well as the primary system, have failed.

A century after Pasteur advanced the germ theory of disease and laid the basis of the new science of immunology, researchers still seek, with limited achievements, to relate the pathophysiology of chronic disorders to a comfortable monofactorial aetiology, one which had yielded so many successes in diseases of infections but which is not relevant in metabolic systems which have evolved in surviving species and individuals.

Perhaps I should conclude, as I did thirty-five years ago, that 'It is our conviction that, today, we stand on the threshold of a new era of the science of psychiatry' as we enter the metabolic age.

Summarily and sketchily, I have presumed on your patience to bring you a few impressions relating to our culture, the arts, sciences, the humanities and certain aspects of our social behaviour:

the evolutionary origins of behavioural patterns over billions of years;

their neuroendocrinologic and socioeconomic substrata in higher species;

the now obsolescing patterns of territoriality and aggression;

the crossing of global watersheds and reversals in just forty years;

the dangers of polarisation and the imperative for depolarisation;

the continuing revolutions of *Homo sapiens;*

the elements which all cultures share, those that distinguish them from each other;

the physiologic basis of some common roots; and characteristics of several of their differences.

I have presented a few of the experimental clinical experiences from which these reflections have grown, and some of the problems faced by those who seek a deeper and better understanding of their originalities, their advances and their diffusion. ●

†*American Sociological Review,* Vol 22, No 6, p637, December 1957.

Some interesting examples of independent rediscoveries in painting and sculpture. Top left: Detail from River Landscape in Rain. *Cha Shih-piao, 1687. Hanging scroll, ink on paper, 88.9×49.5 cm. Bottom left:* Mont St Victoire. *Paul Cézanne, 1902–1906. Oil on canvas 50.2×61.6 cm. Top right: Pot stand with Atlantean figures. Costa Rica, 100 BC to 500 AD. Bottom right:* Vasque des Titans. *Auguste Rodin, France, circa 1880.*

The Holy Roman Emperor, Charles V. Courtesy Mary Evans Picture Library, London.

CHARLES V AND THE ARTS

On 10th April, 1987 Dr Arthur Sackler presented a speech in honour of the opening of the exhibition *Art of the Andes: Pre-Columbian Sculpted and Painted Ceramics from The Arthur M Sackler Collections* at the Hood Museum, Dartmouth College, New Hampshire. The text of this address, which was the last public speech made by Dr Sackler on the arts, is published here in full for the first time.

O tempora, O mores!
(Marcus Tullius Cicero, 106-43 BC)

Charles V and his relationship to the arts moves us to Cicero's lament on the times and the mores. It opened for me a new insight which, I believe, may explain one reason why the arts, the sciences and the humanities appeal to heads of state.

In 1555, at the age of fifty-five Charles V abdicated as ruler of the Holy Roman Empire and installed his son, Philip II. Charles's personal art acquisitions laid the basis for the collection at the Prado, Madrid; for him Ariosto wrote special stanzas for *Orlando Furioso.* Charles championed the humanist, Erasmus, who is enshrined in most memories by Dürer's portrait and, in my memory, as a student of Erasmus Hall High School. The Emperor admired Titian, designating him painter to the House of Habsburg. His relationship to Leoni is memorialised in Leoni's sculptural analogy to Virgil, recalling the poetic paeons to the Emperor Augustus for replacing a tumultuous society with peace and law.

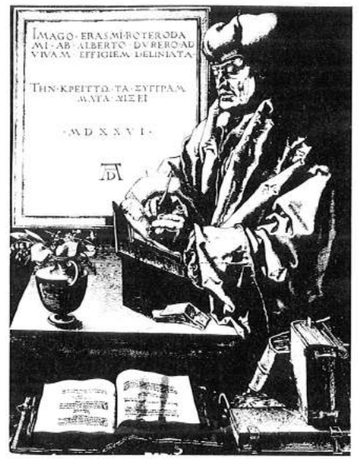
But I believe that Charles V inverted Julius Caesar's maxim:

> 'The evil that men do lives after them,
> the good is oft interred with their bones'.†

The peripatetic Holy Roman Emperor, Charles, defended Europe against the invincible Suleiman the Magnificent, much of whose art and artifacts can be seen at the National Gallery of Art, Washington DC. At the same time, this man, who Sir William Stirling-Maxwell called a 'genuine aesthete', was responsible for conquests of a different sort, virtually genocidal for peoples and destructive of arts in the New World. A contingent of Charles V's Pizarro's men brought down the Incas of Peru, 'the victims of just 168 soldiers, several score horses and four canons'.

With comparable guile and brutality, Cortes conquered Mexico. Both Pizarro and Cortes served their Emperor, a ruler compared to Augustus, badly. With gross cupidity and greed[1] Charles's pioneers in the New World 'melted down art objects of the greatest beauty, the heritage of all mankind, into gold bullion' as, in the name of faith, they destroyed the cultures of peoples on the other side of the globe.

†For 'The good he did in his life lived after him. The evil was interred with his bones'.



Top: Niccolò Machiavelli. Courtesy Mary Evans Picture Library, London. Above: Albrecht Dürer's portrait of Desiderius Erasmus. Courtesy Mary Evans Picture Library, London.

Perhaps this behaviour should occasion no surprise when we contrast the *auto-da-fé* with the sophistication of a society so elegant in its courts and in its courting of the arts and so brutal in its use of the racks of the Inquisition to maim and kill Jews and other heretics. The strokes of the painter's brush, the pounding of the sculptor's hammer and chisel and the composer's sounds of music, in an historic sense, have muffled the cries of the tortured even as they have glorified the conquests and celebrated the 'joyous entries' of the head of the Holy Roman Empire.

Aesthetic sensitivities and the prestigious displays of power were not the sole *raison d'être* for the princely patronage of the arts. They may have been so in significant measure; however, a few days ago another possible ground for the cultural attachments of the Habsburgs, and for other rulers the world over, occurred to me.

I would like on this occasion, therefore, to present my view of this other motivation which, albeit unconscious, may nonetheless account for the support of the arts, the sciences and the humanities on the part of Popes, such as Julius II; of bankers, such as the Medicis, and of rulers generally.

I am, you may say, falling back on my background of psychology. Perhaps. But you should know that my psychiatric orientations are more neuroendocrinologic and chemical. Nonetheless, I think it would be wrong to rule out psychic substrate of certain behavioural patterns. Herewith, I present one such. I lay claim for the blame for its origination, however, and, if you want to be kind, you may credit me as the source.

As you know, the period of which we speak is also the era of Machiavelli, who, after his run-in with the Medicis, devoted himself to projecting his concepts of practical statecraft in *Il Principe.* Many of his observations, garnered in the West, reflect practices of statecraft of earlier days and all regions. For example, deceit and duplicity were as familiar in the Far East as in the West. The Chinese, in their earliest epochs, had learned to go after the emperor by undermining his prince, a safer tactic. Treachery and flattery and insincerity (and sycophancy) were, and still are, rife the world over, part of the daily 'diet' of emperors and rulers. For Charles V they may have been as nauseating as his gout was painful. Why did this tired man retire at fifty to live in a monastery and take with him to the remote solitude of Yuste in Estremadura mainly his beloved art? I submit it was for a special reason, somewhat removed from aesthetics and prestige. For rulers, honesty and integrity are even more precious than for the most of us ordinary mortals, for, in their governance and courts, they encounter so little of these.

I cannot help but consider the enormous attraction evoked, most probably unconsciously, in emperors and rulers, by the most essential element of great art, of great music and poetry, of great science and great performances – integrity. No great art or science, no music or poetry or performance can achieve true greatness without integrity. What Charles V seems to have treasured was not solely an aesthetic achievement; if he did he would have found repugnant and rejected the barbaric behaviour of his men who conquered the New World.

What Charles V sought and treasured was more than an aesthetic thrill, something that I believe appeals more to princes and rulers – the fact, the indisputable fact, that great art, great science and the true humanities are great because they all 'speak' the truth. ●

Reference

1. Hugh Trevor-Roper. *Princes and Artists.* Harper and Row, 1976.

A NEW MILLENNIUM BEGINS

At the inauguration of the Arthur M Sackler Museum at Harvard University, Dr Sackler reflected on the achievements of science which, for the first time in four billion years, have given mankind control over the environment and nature. The text of Dr Sackler's dedicatory address, which was presented on 18th October, 1985, is published here in full.

A new millennium begins in but a decade and a half. After billions of years and myriads of species, a newcomer, *Homo sapiens,* in just two-score years, has traversed a range of global watersheds, completely reversing realities that ruled throughout the existence of our earth.

For the first time in four billion years, wherein all species were at the mercy of the environment, that environment is now at the mercy of one species.

For the first time in four billion years, in which all species were subject to the inexorable forces of chance and selection, one species can change and knowingly influence the processes of heredity and of evolution.

For the first time in four billion years, wherein survival of all species depended on fertility, today some societies of one species, *Homo sapiens,* consider antifertility critical to survival.

For the first time in four billion years, in which gravity's pull has bound all species to planet earth, one species has placed men on the moon, probed into space and now explores the infinite galaxies and timeless reaches of our cosmos.

For the first time in four billion years, a sentient species has turned inward, to inner space, exploring both its mind and matter with finesse and skill revealing structure and function in exquisite detail with bodily integrity inviolate.

For the first time in four billion years, when life ended as vital organs were lost, one species can survive or forestall the inevitable as the inconceivable becomes increasingly routine.

For the first time in four billion years, wherein every species depended on their proximate biosphere for life's essentials, one species can assure their availability for all — food, water, shelter, health and a fertile social and cultural milieu.

For the first time in four billion years, communication, which had been a tactile or chemotactic, visual and auditory, one-to-one or group phenomenon, has become an instantaneous universal process, simultaneously reaching billions of people.

And today, the rate of change in science and technology is accelerating.

This is a time when the disciplines of all our sciences are interpenetrating, when the interfaces between the arts, the sciences and the humanities must be enhanced because on such ultimate integrations and relationships may depend the existence of all mankind.

Artists and humanists must join with scientists in assuring that the instruments our technologies have forged will be wielded with greater humility and greater humanity.

The blinding flash and mushroom cloud that opened our atomic era revealed the power *Homo sapiens* has liberated — for evil or for good. Old Testament philosophers used the term, 'Adama', Hebrew for earth, in naming the progenitor of all men and women, 'Adam'. They poetically observed, 'Dust thou art and unto dust shalt thou return'. *Homo sapiens* must act so that sentient beings, if there be such, from another planet shall not in the future come to a desolate, incinerated, lifeless wasteland and conclude from a surviving copy of *Genesis* that there had existed on this earth prescient individuals who had foretold and sinful people who had fulfilled a dire prophecy.

The science that unravelled the helix and the double helix, deciphered the genetic code and created recombinant technology has turned an inexorable into a controllable process.

The science whose achievements in the biomedical disciplines has preserved lives, particularly of children and the aged, has caused a turn of 180 degrees from fertility cults to antifertility cults, from religious to ZPG zealotry.

The science that replaced earthbound concepts of numbers without limit, 'many as the sand which is by the sea', with wondrous revelations of the multitudes of heavenly bodies, that science has now extended the philosophic and surgical dissections and the poetic searches of humanists of earlier days into our inner world, with new insights afforded by non-invasive scans, positive emission tomography and nuclear magnetic resonance.

Artists and humanists must join with scientists in assuring that the instruments our technologies have forged will be wielded with greater humility and greater humanity.

The science that can restore vital functions with organ transplants and mechanical replacements now thwarts the inevitability of death from heart, kidney or liver failure.

Science and technology can now create all that life requires — a sufficiency of food and water, an adequacy of shelter as well as an optimal functional ambiance in which the needs of health and education can be assured for all.

Science has opened new vistas in intra- and interspecies communication. We must now bring into closer concordance the speed of transmission and the rate of intellectual comprehension. We must recognise the glaring deficiencies which belie our potentials and we must close the gap between the sad content of so much of what we see and hear and the intellectual competence implicit in the technologies revolutionising communication, as photons as well as electrons are harnessed to serve human exchanges.

Science, with intelligence, vision and social insights, must guide our technologies, even as our artists and humanists must relate our emotional and aesthetic sensibilities to new societal conditions.

This is a time to prepare for the manner in which the next century will unfold. Greater intellectual leadership is essential. In the few remaining years of the millennium now ending, *Homo sapiens* must act in a manner more consistent with the implied claim of its self-designation.

It is at this time we dedicate a new cultural institution to the young men and women who will spend most of their lives in the next millennium; to their teachers and the scholars who, in the fifteen remaining years of this millennium, must prepare them to ask the questions, the answers to which will determine the quality, perhaps the survival, of their world.

The young men and women passing through these halls will be exposed to some of the most glorious cultural manifestations of our predecessors in many lands, varied civilisations and differing societal structures. They must comprehend the unique distinction of the intellectual and aesthetic achievements of the species, *Homo sapiens;* equally important, the uniqueness of each of its individuals and, above all, the imperative of preserving and perpetuating them.

All must learn that not alone by bread nor by trade, nor by speech, nor by symbolic acts can the nations of the world arrive at a fruitful harmony, and must know that the continuing trend of infinite escalation of nuclear, commercial, nationalistic and other rivalries carry with them the seeds of destruction.

It is clear that bridges must be built to unite peoples in mutual respect, in reciprocal esteem, in a shared striving for great common goals. I believe that the arts, sciences and humanities can best create those bridges of understanding essential for a world in which all people can link their aspirations to achieve their potentials and the abundances now possible to assure for all the blessings of peace.

Toward these ends I have dedicated a lifetime and now dedicate this institution. ●

FOR A WORLD AT PEACE

On the occasion of the inauguration of the Arthur M Sackler Health Communications Center at Tufts University, Massachusetts, on 21st February, 1986, Dr Sackler spoke in his dedicatory address of his vision of a world at peace and suggested ways in which mankind can strive towards this end. The text of that speech is published here in full.

A world at peace is the *sine qua non* for survival of our, if not all, species. The time is now that peoples and nations must come to address each other in civility, with open minds and open hearts. The continuity of civilisation demands that divisive curtains of ignorance be lifted, the obstacles of prejudice hurdled, and the injustices of intolerance rightfully corrected.

Over four billion years, as life emerged and proliferated on this globe, metabolic needs led to a competition for vital resources among individual organisms and different genera. As population densities increased, rivalries intensified. When food and other life essentials were limited, the need for sustenance drove the territorial imperative, polarising competitive groups in all biospheres. For aeons aggressivity too often determined survival. Species-inbred patterns of reflexes evolved to define territoriality on land, in the air, and in our seas.

The dictating element was a reality or, in higher species, a belief that resources upon which individuals and societies depended were finite. And, for humankind, land provided, above and beyond secure borders, the primary territorial basis for the essentials of life and for the power of societies. Science defined the biologic evolutionary basis of aggression. Creativity in science and technology, rather than territoriality, may be the ruling imperative in the next millennium.

Past millennia give evidence of the aggressions of our species, and the socio-economic substrata of its territorial imperatives.

- Wars were fought for more fertile land. Science and technology, with improved stocks and new seed strains, with better water management and fertilisers, have created abundances in food even in areas and climates where famine has reigned.
- Wars were fought and peoples enslaved for cheap, brutalised labour. The harsh exploitation of the labour of 'man and beast' recedes as industrialisation, computerisation and robotisation advance.
- Wars were fought and lands colonised for raw materials, rubber and such metals as copper and iron. After discovering substitutes for natural rubber, science and technology are superseding copper with fibre-optics, steel with plastics and composites.
- Wars were fought for coal and oil. Science can eliminate threats to national survival of the finiteness of oil reserves, of hydroelectric power and, ultimately, of coal and tar sands as technology conserves energy and discovers renewable, expendable and expandable energy sources.

Jefferson and Franklin, among the founders of American independence, established the philosophic, scientific and humanist path leading to the industrial, scientific and technologic revolutions in our country. In this century, by reducing exploitation of resources and labour, these can ultimately eliminate the *casus belli* of old wars and end cold and hot wars.

Fortunately for peace, three of *Homo sapiens'* greatest creations are proceeding concomitantly and presently peaking — the agricultural, the industrial and the scientific revolutions. Their catalysing interfacings have already proliferated such offshoots as the green revolution, robotisation, computers and biotechnology. More is still to come.

Just forty years ago, two crucial events were triggered. One, the process of intensified polarisation, a cold war pitting nations and systems against each other. The other, military escalation with nuclear weaponry, ushered in by the first blast of the atomic era. The historic irony is that the nuclear threat made polarisation obsolete. For humankind, these phenomena are incompatible. They cannot co-exist. The Iron Curtain, formalised in Fulton, Missouri, two-score years ago, must be raised; the Berlin wall, built twenty-five years ago, demolished.

New paths must be broken, new precedents set. The unity of science, the transcendental reach of the arts and the ubiquity of the humanities have shown the way.

We gather here, men and women of good faith, from different social systems, races and beliefs, from the sciences, the arts and the humanities. Our endeavours and convictions can transcend the arbitrary boundaries of nations. All social systems, if any are to exist in this nuclear age, must do more than co-exist. They must collaborate as scientists do when probing the unknown; they must join hands to promote justice and tolerance, as well as knowledge and understanding. As scientists, artists and humanists, we can attest that this can be done.

Nations can and must work and live together in peace.

With depolarisation we can confront a new century bright with promises of a climate auspicious for nuclear de-escalation and for verifiable matched military force reductions. Social and political interchanges can build on the confidences which depolarisation can inspire. And, logic suggests that depolarisation and confidence-building will be reciprocally energising and synergising processes.

For a world at peace we must have fruitful dialogues to transcend temporal and spatial, religious and ethnic, national and social differences. Basic unities of humankind are manifested in the arts and the sciences, the humanities and great religions.

In the Judeo-Christian tradition, bread was more than the staff of life. To break bread together is a symbolic act of friendship and peace, of communion and shared spirituality. In all societies, to share food is an act of hospitality. Science is creating a sufficiency of food for all to have and to share. Great faiths proclaim the principle of love for all of humankind. In our days, the health and well-being, the lives and fulfilment of all peoples depend upon our sharing the bread of knowledge, the yeast of learning.

Today, our inaugural reaches across the seas. We share with our fellow doctors and scientists in China the common heritage of all humankind as we seek to strengthen the sciences and technologies that must serve all the world's peoples.

Tomorrow, our transmission to Mexico will go beyond both our borders to all the Americas, and across the seas, to Africa and to other lands whose shores are washed by the Indian as well as the Pacific Oceans.

It is fitting that this precedent-setting, satellite-linked celebration derived from our commitment to scientific, art and humanistic co-operation with the peoples of China. Men from China in the last century came to our country; they laid the iron rails which bound together the peoples of America as they connected our coasts. Today, their descendants and new pioneers from the Asiatic mainland are gloriously opening new territories of the mind in our universities, scientific and cultural institutions.

New paths must be broken, new precedents set. The unity of science, the transcendental reach of the arts and the ubiquity of the humanities have shown the way.

This centre is founded on the premise that science and technology, like the arts and humanities, are the legacies of all peoples. It honours the precepts of Hippocrates and Maimonides; da Vinci and Galileo; Copernicus; Bacon and Harvey; Newton and Darwin; Jefferson and Franklin; Claude Bernard and Pasteur; Metchnikoff and Pavlov; Leibniz and Helmholz; Koch and Erlich; Osler and Linus Pauling; and, giant among giants, Albert Einstein.

This centre is rooted in the great tradition of free and full exchanges between peoples and nations for the advancement of all.

This centre will teach biomedical and health sciences with the most modern state of the arts of pedagogy.

This centre will mobilise disease registries, reference and data banks, utilising the best epidemiological and biostatistical tools.

This centre will train a new breed of classical and clinical pharmacologists to speed discovery and deploy new medicines and technologies to conquer disease.

This centre will develop clinical benchmarks for comparative toxicology, both therapeutic and environmental.

This centre will focus and improve perspectives on the priorities of health and those set by disease.

Here, teachers and scholars, scientists and technologists will seek to advance public health communication to better inform practitioners, researchers and the public, to improve and protect the health of all peoples.

Our centre is dedicated with the conviction that, for a world at peace, the sciences, arts and humanities in their boundless reaches must promote greater justice, eradicate inequalities and eliminate wars.

For a world at peace, divisive rivalries must be resolved as science and technology transform the finiteness of our natural resources into infinities of new abundances and opportunites.

For a world at peace, ignorance and intolerance must be dispelled; depolarisation must foster understanding and co-operation between peoples.

In a world at peace, unique diversities in social and economic structures, in religious and ethnic traditions, in their manifold nuances and rich variety can enhance the beauty of all our lives.

In a world at peace, the fructifying role of the arts and humanities will augment humankind's cultural achievements and the humanity of our sciences.

This, our health communications centre,
Is dedicated to all peoples
For a healthier and more enlightened,
A happier and more prosperous world,
A world at peace. ●