

The Andrew W. Mellon Foundation

*Report
from January 1, 1999
through December 31, 1999*

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As of December 31, 1999

THE ANDREW W. MELLON FOUNDATION, a not-for-profit corporation under the laws of the State of New York, is the result of the consolidation on June 30, 1969 of the Old Dominion Foundation into the Avalon Foundation with the name of the latter being changed to The Andrew W. Mellon Foundation. The Avalon Foundation had been founded by Ailsa Mellon Bruce, daughter of Andrew W. Mellon, in December 1940 as a common law charitable trust. In 1954, it was incorporated under the Membership Corporations Law of the State of New York. The Old Dominion Foundation had been established in 1941 under the laws of the Commonwealth of Virginia by Paul Mellon, son of Andrew W. Mellon.

The purpose of The Andrew W. Mellon Foundation is to “aid and promote such religious, charitable, scientific, literary, and educational purposes as may be in the furtherance of the public welfare or tend to promote the well-doing or well-being of mankind.”

Under this broad charter, the Foundation currently makes grants on a selective basis to institutions in higher education; in cultural affairs and the performing arts; in population; in conservation and the environment; and in public affairs.

Within these fields, the Foundation directs most of its grantmaking to particular areas of interest, which are made known in a variety of formal and informal ways. Annual Reports describe grantmaking activities and present complete lists of recent grants. In addition, organizations are welcome to request further information concerning the nature and extent of the Foundation’s activities in a specified area. The Foundation seeks to be clear about its priorities so as to provide reasonable guidance to those who are considering investing time and resources in preparing proposals.

Grant proposals are reviewed throughout the year, and no special forms are required. Ordinarily, a short letter setting forth the need, nature, and amount of the request and justification for it, together with evidence of suitable classification by the Internal Revenue Service and any supplementary exhibits an applicant may wish to submit, are sufficient to permit consideration by the staff. Applicants must recognize, however, that the Foundation is able to respond favorably to but a small fraction of the requests that it receives. Only rarely is a grant made in response to an unsolicited proposal outside defined areas of interest, and prospective applicants are encouraged to explore their ideas informally with Foundation staff (preferably in writing) before submitting formal proposals. The Foundation does not make grants to individuals or to primarily local organizations.

PRESIDENT'S REPORT

The Foundation's annual report serves, first of all, a stewardship function. All of the individual grants made in 1999 are listed at the end of the report, and a summary tabulation is provided by category. The Trustees appropriated over \$161 million in 1999, and nearly two-thirds of this amount (64 percent) was in support of a wide variety of projects in Higher Education and Scholarship. The remaining grants were concentrated in five other categories: Conservation and the Environment (11 percent); the Performing Arts (10 percent); Population Studies (8 percent); Museums and Art Conservation (4 percent); and Public Affairs, including the Refugee Program (4 percent). The Foundation's longstanding commitment to the humanities is reflected in this pattern of grantmaking, as is the belief that a reasonable degree of continuity in support is important if lasting results are to be achieved. We have not followed a "stop-and-start" approach.

Each year is also witness to new emphases and new initiatives, and to the phasing out of activities that either have served their purposes or no longer have as strong a claim on the Foundation's resources as they once did. A second function, then, of the annual report is to inform potential grantees and others of the ways in which various programs are evolving and of new ideas being explored by the staff and Trustees. It is not practical, however, to cover every program on an annual basis; in order to provide some focus, we concentrate each year on a small number of topics that seem especially timely.

This year, the president's report has a single primary focus: how the Foundation is addressing the impact of information technology (and especially digitization) on scholarship, scholarly communication, and libraries. Because this is such an important area, and is changing so rapidly, we thought there would be merit in providing enough detail to allow grantees and other interested parties to understand the Foundation's thinking as it has evolved. In addition, this year's report contains a special essay on the Foundation's new initiative in Refugee Studies and Forced Migration written by

Carolyn Makinson, the staff member who is also responsible for the Foundation's population program.¹

Focusing on these particular areas provides only a partial picture, however, of the range of the Foundation's activities. The extent of continuing support for established programs—such as the Mellon Fellowships in the Humanities, the Sawyer Seminars, and a wide variety of post-doctoral fellowship programs—is evident in the list of grants at the end of this report. There are also important new developments in areas of higher education in which the Foundation has long been active, and next year's annual report will focus on initiatives at both liberal arts colleges and universities, including the continuing evolution and deepening of the Foundation's efforts to encourage promising minority students to pursue academic careers (most notably through the Mellon Minority Undergraduate Fellowship Program).

Staffing

This account of programmatic directions needs to be prefaced by a discussion of major staffing changes that have occurred at the Foundation, since programs and the people responsible for leading them cannot be considered apart from one another. This tenet—that basic judgments about program directions and staffing must go hand in hand—is basic to the Foundation's style of grantmaking, which depends heavily on the presence of highly accomplished staff members who are able to work closely and effectively with key institutions in the fields of particular interest to the Foundation and its Trustees.

The Foundation has been fortunate in having attracted in earlier years individuals who continue to contribute outstanding lead-

¹Ms. Makinson's essay also serves the useful purpose of illustrating the Foundation's basic approach to grantmaking, which emphasizes education and research and the careful selection of a manageable number of key organizations that can provide leadership in a field. The 1998 essay by Catherine Wichterman on symphony orchestras in the United States illustrated this same theme. The first wave of grants made in support of the new orchestra program is listed at the end of this report. The symphony orchestra program is designed to buttress the core artistic values of a selected group of community-based orchestras as they seek to strengthen the role of musicians and composers in setting and carrying out artistic directions.

ership in fields of central interest to the Foundation: Harriet Zuckerman and Pat McPherson (higher education); William Robertson (conservation and ecology); Carolyn Makinson (population, refugee studies and forced migration); Catherine Wichterman (performing arts); Angelica Rudenstine (museums and art conservation); and Tom Nygren (South Africa, technology).

In 1999, three other senior colleagues, who have contributed enormously to the work of the Foundation, moved to important new positions outside the Foundation. Stephanie Bell-Rose was elected president of the newly created Goldman Sachs Foundation; Richard Ekman was appointed Vice President for Programs at Atlantic Philanthropic Service Company, Inc.; and Jacqueline Looney returned to Duke University to serve as Associate Dean of the Graduate School. We also anticipate that two senior advisors will retire this June: Henry Drewry, who created the Foundation's Mellon Minority Undergraduate Fellowship (MMUF) Program and currently works with the Historically Black Colleges and Universities (HBCUs) and Alvin Kernan, who directed the Foundation's portable fellowship program in the humanities and has served with distinction as senior advisor in the humanities.

In my view, the Foundation has been extremely successful in identifying and attracting able new colleagues. Michele Warman, an accomplished lawyer, has come from Davis Polk & Wardwell to accept the position of General Counsel and Secretary, and Gretchen Wagner, who worked with Ms. Warman at Davis Polk, has come as Assistant General Counsel; Donald Waters, who most recently was Director of the Digital Library Federation, has joined the Foundation as Program Officer for Scholarly Communications; Lydia English has come from Brown University, where she was Associate Dean of the College, to succeed Ms. Looney as Director of the MMUF program and as a Program Officer in Higher Education; Danielle Carr, a mathematician who was on the faculty at Bryn Mawr, is now working in the liberal arts college area and will succeed Henry Drewry as the staff member with direct responsibility for the Foundation's relationships with the HBCUs; Joseph Meisel, who recently completed his PhD in British history at Columbia University while working in the university's budget office, has come to the Foundation to work principally with Harriet Zuckerman on issues facing research universities and centers of

advanced study. Finally, Bernard Bailyn of Harvard and Paul Hunter of the University of Chicago have accepted invitations to advise the Foundation on future directions in the humanities.

For as small an organization as this one, this is a lot of change! We will of course miss those who have done such excellent work here; we wish them well, and we are proud that those who are not retiring have taken on such important new responsibilities. At the same time, we are delighted by the ideas and considerable energy that our new colleagues are already contributing and by the wide variety of experiences and skills that they have brought to the Foundation.

*Information Technology, Scholarly Communication, and
Libraries: Introduction and Organization of the Discussion*

The relation between staffing and programmatic directions is nowhere clearer than in the area of information technology and its applications in higher education, the arts, and other fields that depend on access to databases and other scholarly resources. The Foundation has assembled individuals with a range of special skills and experiences that will permit it to play a useful role, we believe, in helping to conceptualize new directions at a time when technological advances are changing dramatically how scholarly materials are published, presented, stored, and used by scholars worldwide.

In a previous discussion of this general subject, last year's annual report was unequivocal in emphasizing that the Foundation intends to maintain its traditional emphasis on the importance of substance and content, rather than on technology for its own sake. At the same time, the staff and the Trustees believe that the Foundation can play a special role in mediating between rapidly developing technological possibilities and those applications most likely to benefit education and scholarly research. Work with grantees in 1999 has reinforced this conviction.

The discussion that follows is intended to highlight themes that connect a number of grants made during 1999 (and earlier). These include:

- The evolution and future prospects for JSTOR, an electronic database containing the backfiles of leading scholarly journals,

that was the Foundation's first major project in the application of information technology to scholarly communication;

- Related projects sponsored by the Foundation, including those devoted to the digitization of monographs and digital archiving;
- New opportunities that are emerging in the imaging of art and related scholarly materials that are otherwise inaccessible or widely dispersed, and the possible creation of a new "ART-STOR" entity (a parallel to JSTOR) that would organize and distribute electronic archives of art images, manuscripts, and relevant scholarship;
- Issues of intellectual property rights that affect many of these projects, and especially the imaging of art;
- The status of college and university libraries in a changing environment shaped increasingly by electronic technologies.

At the December Board meeting, our colleague, Harriet Zuckerman, directed attention to the interconnections among what she called "a growing array of Foundation activities aimed at bringing content and coherence to the broad field of electronic scholarly communication, including the changing role of the library." "JSTOR's contribution," she noted, "is to *provide textual content*, to ensure its preservation, and to facilitate easy access to scholarly literature that might otherwise never be located or used." Grants in support of the proposed Dunhuang Archive and the digitization of MoMA's design collection (discussed later in this report) will provide another kind of electronic content, in these instances in the form of images linked to text. Other grants (including the one to the Institute for Advanced Technology in the Humanities at the University of Virginia, also discussed later) aim to improve the *means of delivering content* by supporting the design of sophisticated databases and other kinds of software. She then referred to a substantial series of grants focused on libraries, which are intended to help students and faculty *become proficient users* of electronic content. Finally, grants have been made for the purpose of *assessing the*

legal and economic implications of electronic publishing and archiving. “Separately and together,” Ms. Zuckerman concluded, “this array of grants should help faculty members, students, libraries, and scholarly publishers navigate—and shape—the still inchoate and rapidly changing world of electronic access to information.”

JSTOR

When the Foundation made its first JSTOR-related grants in 1994, the intention was to explore the feasibility of creating and making available a new kind of electronic archive of journal literature. The history of JSTOR—now a free-standing, not-for-profit organization with its own Board—is fascinating and full of lessons. (This history deserves to be recorded, and a colleague at the Foundation with experience at JSTOR hopes to begin work on this assignment in the summer of 2000.) Kevin Guthrie, the president of JSTOR, will be presenting his own account of its recent results and current plans, and my objective here is not to report for JSTOR but to note important points of intersection between JSTOR and the broader interests of the Foundation.²

JSTOR Usage and Content: Priorities and Funding Principles

College and university presidents and librarians have spoken with essentially one voice in endorsing what JSTOR has accomplished to date. Echoing Samuel Gompers’ famous response when he was asked what the American labor movement wanted (“More!”), they have urged the Foundation to help JSTOR include more and more content. This is not surprising. By the end of 1999, JSTOR had more than met its Phase I goal, which was to make available to participating libraries the full backfiles of at least 100 core scholarly journals. In fact, the database contained 117 journals in 15 academic disciplines (over 750,000 articles and more than 4.6 million pages of content). In 1999, over 4 million searches were performed on the database and over 1.3 million articles were

²Readers interested in learning more about JSTOR should consult its Web site (www.jstor.org), which contains an extended account of JSTOR’s purposes, its scholarly content, participating libraries, fees, and how the database is built and used. Requests for additional information can be sent by e-mail to jstor-info@umich.edu. Earlier annual reports describe the history of the Foundation’s relationship to JSTOR.

printed from it. Usage continues to grow at an astonishing rate (tripling in the most recent year), and one challenge for JSTOR is to build server capacity fast enough to maintain its high standard of performance. At the time of this writing, in mid-February of 2000, 651 participating libraries, including 121 outside the United States, had demonstrated their confidence in the utility of JSTOR by paying the fees necessary to gain access.

JSTOR has succeeded in faithfully replicating the “look and feel” of the original articles, it is easy to use, and it contains a high fraction of the most prestigious and widely cited journals in each discipline that it covers. From the beginning, the plan was for JSTOR to become a self-sustaining entity—beneficiaries of JSTOR’s services, initially college and university libraries, were expected to cover its costs on an on-going basis. This plan is working. JSTOR is nearing the point when the revenue it receives from annual access fees paid by participating libraries will cover the costs of maintaining the existing Phase I database. In other words, if JSTOR decided not to add new content or take on more projects, it would soon generate sufficient revenues to cover the costs of fulfilling its original set of promises to the scholarly community.

Operating in a maintenance mode is not, however, what the academic community is imploring JSTOR to do. Indeed, in response to the insistent demand for “more,” JSTOR’s Board has decided to embark on an ambitious enhancement of the original list of titles and is now planning to double (more or less) the content of the arts and sciences core collection. In addition, it plans to add a series of stand-alone collections in fields such as general science, ecology and botany, business and finance, and language and literature.

A key issue for everyone interested in this project, and one which the Foundation’s Trustees have discussed at length, is how additions to the JSTOR database should be funded. In the main, JSTOR will continue to follow the basic principles that have guided it to date. Thus, when libraries agree to join JSTOR or to take new content, they will be asked to pay both a one-time “Archive Capital Fee” (formerly called the “Database Development Fee”) and an “Annual Access Fee.”³ The one-time fee is intended to cover part

³These fees are scaled according to the size and character of the participating libraries. (See www.jstor.org for more information.)

of the initial costs of digitization as well as to provide resources to ensure that data and software can be migrated to new platforms as technology evolves (thereby addressing, for this body of literature, the “electronic archiving issue”). The annual fee will cover the recurring costs associated with: (a) providing the server capacity and technical support needed to make sure that users have convenient and reliable access to the archive 24 hours a day and 365 days a year (this “library” never closes); (b) training for new users; (c) adding a substantial amount of new content each year as the “moving wall” that divides current issues from the backfiles moves forward (which means adding another year’s worth of articles published by the growing number of journals);⁴ and (d) maintaining JSTOR’s infrastructure.

Together, these charges should not be so high that they discourage libraries, especially those with limited resources, from participating in JSTOR. Herein lies the challenge: JSTOR must balance its core desire to fulfill its not-for-profit mission with the requirement that it pay its own way. If JSTOR were to follow a strict “market-driven” philosophy in deciding what content to add, it would add only that content for which there is a relatively large set of users willing and able to pay for access. The direct consequence would be a disincentive to add more humanities content or content in relatively esoteric fields such as Near Eastern and Slavic Studies. There simply are not enough departments, scholars, or students in some of the more specialized fields to justify, on market assessments alone, the investments required to develop the content.

The conclusion we have reached is that outside funders, principally foundations, should be encouraged to invest in adding new content, while participating libraries and other users should be expected to cover the recurring costs of maintaining an ever-expanding database as well as some (but not too large a share) of the initial capital costs. The Foundation’s Trustees have shown their

⁴The “moving wall” may vary in duration from one year to five years (depending on the journal); it serves to protect the revenues of publishers by discouraging libraries from canceling subscriptions to the current issues. As a consequence of the existence of the moving wall, over 115,000 new pages were added to the database at the beginning of 2000. This number will grow from year to year in response to increases in both the number of journals in JSTOR and the number of pages in the more recent issues.

willingness to continue to provide this kind of support. At its December meeting, the Foundation's Board appropriated \$1.75 million to cover part of the upfront costs of adding the full backfiles of another 35 journals in humanities fields such as history, classics, and archaeology. In addition, the Foundation made a second contribution in 1999 to building the JSTOR database through an appropriation of \$2 million to the Modern Language Association (MLA). The MLA will assemble a list of key journals in modern languages and literatures and then work both with the publishers and JSTOR to make a separate "languages and literatures" collection available. The MLA and JSTOR will also assess the possibility of developing an indexing interface between the widely-used MLA bibliography and JSTOR.

It is encouraging that other foundations have also seen the importance of adding content to JSTOR based on the academic case for doing so. The Stavros S. Niarchos Foundation made a generous contribution to assist in covering the high costs of digitizing the classics and archaeology journals. Two other grantors, the Howard Hughes Medical Institute and the Josiah Macy Foundation, joined the Mellon Foundation in providing support for production of the general science collection (which will include all the backfiles of *Science*, the *Proceedings of the National Academy of Sciences*, and the journals published by the Royal Society in London, which go back to the 17th century).

JSTOR is now in the process of approaching other funders in the hope that they, too, will want to underwrite, at least in part, the upfront costs of adding content in fields such as area studies, the social sciences generally, and selected natural sciences. If the currently planned enhancement of the arts and sciences collection can be completed, nearly 10 million pages of text will be accessible at the desktops of scholars, teachers, and students.

Another question is whether all of this content should reside at JSTOR. One could imagine other possibilities. For example, the MLA might have concluded that it should embark on its own program to digitize backfiles entirely apart from JSTOR. A more fragmented model of this kind is inevitable to some degree since JSTOR will never have the resources to digitize all of the scholarly literature that people will want captured in this way. However, there are two advantages to including as much core content as possible in

an integrated database such as JSTOR. First, it makes sense that JSTOR leverage the knowledge and experience that it has gained in digitizing content; to the extent possible, the scholarly community should avoid having to re-invent the proverbial wheel. Second, users of scholarly literature naturally prefer to be able to access a single large collection of materials rather than a number of separate collections. Adding new journals and new fields to JSTOR has multiplicative value since one of JSTOR's great strengths is that it allows users to search across disciplines (joining, for example, titles in literature to history and philosophy content). On purely intellectual grounds, then, there is a strong case for including in JSTOR as much related journal literature as possible. "Going it alone" is not only potentially costly and inefficient, it can also be undesirable from the perspective of faculty and students.

Linkages to Other Databases and to Current Issues

However strong the appeal of building a comprehensive collection of materials, we know that users will want to link content in a database such as JSTOR to other scholarly resources. More and more efforts are being made to address the legal as well as the technical and financial issues that have to be resolved in order to allow scholars to work with digital resources that are distributed but connected.

Equally important are ongoing efforts to find workable ways of linking the backfiles of journals in the JSTOR database to the electronic publication of current issues. If such linkages can be created in ways that protect publisher revenues (as we believe they can be), the benefits to scholars and to libraries will be tremendous. The scholar interested in a particular topic, such as conceptions of "culture" in German philosophy and literature or the urbanization of South Africa, is served best if he or she can search across the entire run of a journal, from the first issue to the most recent, without having to consult both the backfile and then (separately) current issues. For the library, such linkages could simplify user services and provide large cost savings. Libraries would still need to subscribe to current issues (albeit sometimes solely in electronic form)—otherwise publishers could not continue to afford to publish them! But if the librarians could be confident that their users would always have ready electronic access to the full run of a jour-

nal, they could then contemplate saving money not only on storage costs (as growing numbers of libraries with access to JSTOR are beginning to do now), but also on the costs of binding current issues and, conceivably, on the costs of handling paper copies in any form.

These and other aspects of the economics of journal publishing and library operations deserve continuing study. Fortunately, some “natural experiments” are underway that will allow us to analyze the effects of linking current issues to backfiles. There is no longer a gap between JSTOR’s coverage of the backfiles of *Eighteenth Century Studies* and the electronic editions of current issues provided through Project MUSE. Other publishers are shortening their “moving walls” (from five years to three years in the case of the American Economic Association) and several, including the University of Chicago Press, are interested in working with JSTOR to link their current issues directly to the JSTOR backfile. From the beginning, the Foundation’s objective in creating JSTOR was to provide a resource that would be *both* “better and cheaper.” The long-run savings to libraries should be substantial, and the Foundation remains committed to promoting cost-effective approaches to the electronic archiving of journal literature and to demonstrating the savings that can be achieved.

Broadening Access to JSTOR

In addition to digitizing and adding content, foundations can play an important role in broadening access to scholarly resources such as JSTOR. In 1999, for example, both the Bush and Mellon Foundations made grants to the Minnesota Private College Research Foundation so that it can underwrite the start-up costs of providing access to JSTOR to a number of small and medium-sized colleges in Minnesota and the Dakotas. The Foundation’s earlier grants of a similar kind to the Appalachian College Association have had extremely beneficial effects on teaching and scholarship at the member institutions.

Other foundations with special “country interests” have helped to underwrite the costs of making JSTOR available in Ireland, Greece, and Israel. The Foundation continues to hope that efforts in South Africa to enhance connectivity and reduce its costs will make it possible to provide access to JSTOR in that country. It is

only a matter of time before it will become feasible to make JSTOR available in other developing countries, many of which have virtually no access to scholarly literature.

Back in this country, the Sherman Fairchild Foundation is underwriting a pilot project to explore the value of making JSTOR (or parts of it) available to selected secondary schools; and JSTOR is also considering ways of making its archive available to public libraries. Scholarly associations, such as the American Sociological Association, are experimenting with programs designed to give individual members, including those who have no affiliation with a major library, access to their parts of the JSTOR database. More generally, the American Historical Association has suggested that consideration be given to ways in which the “independent” or unaffiliated scholar can be helped to gain access to JSTOR. In the long run, it is possible that JSTOR will need to focus more on relationships with end users (individual scholars) rather than rely almost exclusively, as it does now, on relationships with libraries and other intermediaries.

Monographs and Other Archival Projects

The Foundation has also sponsored a variety of projects intended to develop and test techniques for digitizing and distributing electronically materials of many kinds, and it is only limitations of space that prevent me from discussing a number of them here. Special mention should be made of monographs. Following earlier grants in support of the Cornell-Michigan *Making of America* project, Columbia University’s *Online Books* project, and the *Early American Fiction* project at the University of Virginia, the Trustees made several grants in 1999 for projects intended to explore further an important but complex arena for digitization.

The American Council of Learned Societies (ACLS) received an appropriation of \$3 million to carry out an ambitious collaborative project involving five learned societies and seven university presses. A unique feature of this project is that it intends, over six years, to produce 85 newly written electronic monographs, all in historical studies. Unlike the American Historical Association’s plan to produce electronic versions of doctoral dissertations (which is also being funded by the Foundation), the ACLS project, which

is led by John D'Arms, aims to attract established authors who will want to write broad-gauged books that take advantage of the electronic medium. In the words of the historian Robert Darnton (a participant in the ACLS project), an electronic book, unlike a conventional one, can be "structured in layers that are arranged like a pyramid:" it can be read in a "linear" way for the development of its argument, can be plumbed for back-up data, bibliography, and the whole texts of source documents, and can be linked with correlative material located on other Web sites.

The ACLS and its collaborators are also committed to digitizing 500 backlist titles in related fields, along with major reviews of these titles, and to mounting the resulting collection of old and new monographs in a searchable database that will be made available to libraries on a subscription basis. While many of the practical details remain to be worked out, an important goal of the project is to test the economic viability of publishing electronic monographs. To that end, the project aims to find ways to standardize and streamline production processes; develop an infrastructure that will address the archiving issues that exist here as well as in the journal field; ensure that commercial vendors do not dominate the electronic dissemination of the results of scholarly research; promote the publishing of more monographs of high quality (but low market potential) by reducing costs and simplifying distribution; and, finally, encourage more presses to experiment with electronic publishing.

Grants were also made in 1999 to the University of Pennsylvania library, so that it can work with Oxford University Press (OUP) to create a large digital library of approximately 1,500 volumes in all fields of history, and to the University of Virginia to complete the digitization of a large group of early editions of American literature. The decision to support this particular set of projects, focused as they are on scholarship in the fields of history and literature, reflects both the Foundation's commitment to the humanities and its conviction that new developments in information technology should include such core subjects. We also recognize, however, that "the jury is out" on the question of how successful electronic publication of monographs will prove to be. In the case of journal literature, the enthusiastic responses of faculty and students to JSTOR demonstrate that very important substantive gains have been achieved already through the application of digital technology. In

the case of monographs, no such persuasive evidence exists as yet, and it is clear from the design of several of the projects described above that not even an initial assessment of their “value added” will be possible for at least five years.⁵

*The Digitization of Works of Art:
Possible Creation of an “ARTSTOR”*

The most important early-stage investments made by a foundation do not always take the form of dollars appropriated. During 1999, staff and Trustees devoted a great deal of time and thought to ways in which the Foundation might encourage the creation of electronic archives of art and related scholarly materials. This area is in many ways a “natural” for the Mellon Foundation. Paul Mellon’s longstanding interest in works of art has been reflected in the Foundation’s own history of grantmaking in support of museums, the arts, and art conservation. There is an opportunity now, the Trustees believe, to extend this interest in the fine arts into a new era that is being shaped profoundly by advances in information technology. The Foundation’s interests in information technology and its long-term commitment to the arts and to scholarship in the humanities intersect in this rapidly developing area. The hope is that the Foundation’s experiences with the application of information technology in other fields, and especially with the development of JSTOR, can be translated into useful work in the fine arts.

In order to advance its broad interest in the digitization of works of art, and in order to learn more by “doing,” the Foundation decided in 1999 to provide substantial support for two large and very different projects holding great scholarly promise—one focused on the architecture and design collection at the Museum of

⁵ Other grants made in 1999 include support for the creation of an electronic finding aid to the Medici Granducal Archives, the development of an integrated digital library of research resources and scientific collections at the American Museum of Natural History, and the planning and establishment of an archaeological information system and a digital archive of archaeological data that will advance the study of slave culture during the colonial and antebellum periods. This last project illustrates the Foundation’s interest in funding projects that address important scholarly objectives while simultaneously providing an opportunity to learn broader lessons (in this instance, the role of information technology in facilitating inter-site comparative research in the discipline of archeology).

Modern Art (MoMA) in New York and the other on the cave art of Dunhuang in Western China. Consideration is also being given to the broader possibility of creating a JSTOR-like entity that might provide a common, coordinated system of distributing electronically high-quality “collections” of visual materials, including some that are otherwise inaccessible. (We refer to this hypothetical entity as “ARTSTOR,” but this designation is only a temporary shorthand; if we proceed with this concept, as seems likely, it will probably be given a different name.)

There is already a great deal of activity in this broad field, but much of it consists of relatively small-scale, generally uncoordinated, efforts to digitize particular collections or parts of collections. On the basis of a recent survey of projects currently underway, we believe that a larger and broader effort focused on building a research-quality scholarly resource could have a significant leveraging effect—especially if launched relatively soon. Few of the current efforts to digitize art images are focused primarily on the needs of the scholar, and there appears to be insufficient emphasis on intellectual coherence. (As our colleague, Donald Waters, puts it: “The overwhelming first impression in this arena, as in many other parts of the Web, is its ‘wild west’ qualities. . . .” Another observer refers to it as a “cottage industry.”) But before saying more about the larger organizational questions, it may be helpful to provide a clearer sense of what is envisioned by describing the two pilot projects now underway.

The Design Collection of the Museum of Modern Art

At their March 1999 meeting, the Trustees appropriated \$1.7 million to digitize a large part of MoMA’s architecture and design collection. It was established in the early 1930s and is one of the foremost collections of its kind: international in scope, representing substantial coverage of the best in modern design from the mid-19th century to the present. Although its existence is well known, the collection is virtually inaccessible. Only five percent of its works are published, and opportunities to study the material are scarce. Unlike many museum collections, these works, many of which are three-dimensional, often quite large as well as fragile, are stored in various locations, mostly off-site, under conditions that render access extremely difficult even for local scholars; access for the international research community is virtually non-existent. The

digitization of over 6,000 works from this collection will make these holdings available, for the first time and in unprecedented ways, combining images of the highest resolution and appropriate text with user interfaces and exceptionally flexible search mechanisms developed by Luna Imaging.

This project is conceived primarily to meet the exacting needs of scholars. It addresses the form that visual collections need to take in a digital environment if they are to support research and scholarly practice. From the start, scholars in the field have endorsed this particular perspective, not only emphasizing the intrinsic appeal of making this important collection available, but also drawing attention to the project's potential value as a methodological model for future initiatives in the digital field. Professor Barry Bergdoll of Columbia University strongly endorsed the multiple advantages of providing access to "the oldest and most complex collection of design in the world, together with the highest quality of catalogue information, and a powerful set of search capabilities hitherto unknown." Peter Rowe, Dean of the Faculty of Design at the Harvard University Graduate School of Design, predicts a broad scholarly constituency for the resource:

I think it is safe to say that the very mode of representation embodied in the project will quickly become expected in research quarters, much as the hard-copy library files of earlier times formed, shaped, and nurtured the scholarly habits of our predecessors. . . . The real power and intellectual usefulness of the image resources lie not only in the availability of the data *per se*, although that is certainly impressive, but in the interactive capacity that we as scholars will have as a consequence of the data system design.

In the ten months that have elapsed since approval of the grant, great progress has been made in capturing images at a very high level of resolution, supporting them with appropriate catalogue data, and developing associated information systems that will enrich the scholar's search capacity in a variety of ways. It will take at least two more years, however, for the particular characteristics of this digital design collection to be effectively tested within the scholarly community and to be made available for wider distribution.

Wall Paintings and other Art from the Dunhuang Cave Shrines

The second pilot project offers an unusual opportunity to digitize art of great importance in a remote part of the world—Dunhuang, in northwestern China on the edge of the Gobi desert—that then can be linked, it is hoped, to manuscripts, paintings, and other materials that were once at the site but have since been widely dispersed. Dunhuang was a major stopping point for the caravan trade between China and the West, which moved along what is now called the “Silk Road.” Between approximately the 5th and 10th centuries, Buddhist art was introduced to Dunhuang, a great many cave shrines were built there, and extraordinary collections of manuscripts were amassed in what was called the “hidden library” (because it was walled off in 1002 to protect it from invaders). These treasures were undiscovered, and protected by the dry air of the desert, for almost a millennium. The “hidden library” was reopened by a Chinese monk in 1900. In the following 25 years, various European adventurers and archaeologists came upon the caves and transported a considerable number of their finds back to sponsors in Britain, France, Germany, India, Russia, and other countries. The Chinese stopped this unauthorized export of their art in the mid-1920s, moved some objects to Beijing, and have since attempted, as their resources have permitted, to protect the very considerable amount of cave art that remains.

Dunhuang is arguably the most important site of Buddhist art and culture in Asia. Wall paintings and sculptures chart the transmission of Buddhism—from India to China—through the crucial transportation routes of Central Asia. Moreover, the thousands of documents originally stored in Dunhuang’s library cave provide one of the most extensive records available of the exchange of goods, people, ideas, and languages across the world’s largest land mass. The creation of an online Dunhuang Archive that re-connects the remaining cave art with the most important manuscripts and objects now dispersed all over the world would produce an invaluable scholarly resource for the study of the history, art history, archaeology, religion, and culture of medieval China. It would also serve to introduce East Asian murals more broadly to the art historical community and make them available for detailed study in ways not possible with traditional photographic techniques or even on-site visits. The Archive has the potential to transform the way

that Chinese art is viewed and discussed and to serve as a model for reuniting materials now physically dispersed in many libraries and museums around the world.⁶

Professor Sarah Fraser at Northwestern University first brought the possibilities of this project to the attention of the Foundation, and the Trustees approved three separate appropriations to Northwestern in 1999 in support of the photography, digital image processing, and cataloguing of selected portions of the cave art in Dunhuang. Experimental photography in two caves (carried out by Harlan Wallach of Northwestern University) has been extraordinarily successful in producing images of a quality that would allow scholars to see some areas of the caves far more clearly than is possible on the site. However, agreement still has to be reached with the Chinese authorities on continued access to the caves and the handling of intellectual property rights (see below) before the major part of the digitization of the cave art can be undertaken. Representatives of the Foundation have made two visits to China to discuss these complex matters, and we have been encouraged by the clearly expressed desire of our Chinese colleagues to join with us in crafting an agreement that will meet the needs of all parties.

Current estimates suggest that a full program of cave photography and database construction would cost well over \$3 million, and the Trustees have committed the Foundation to provide this funding, assuming that suitable legal agreements are in place. In addition, the Trustees have agreed, in principle, to support the digitizing of manuscripts and other works of art that now reside in museums outside China, and the integration of these images into a Mellon International Dunhuang Archive for which the Foundation would take responsibility. Finally, an appropriation was made in 1999 to the Dunhuang Research Academy to support activities associated with the commemoration of the centennial of the reopening of the Library Cave.

This is obviously an ambitious, costly, and highly complex pro-

⁶The Dunhuang project also serves two other objectives which are especially consequential for the Chinese: (1) the recording (documenting) of unique cave art that could be lost to erosion or other natural calamities any day; and (2) the training of Chinese in the skills of digital photography that will allow them to document many valuable parts of their cultural heritage.

ject. It also presents an unprecedented opportunity to demonstrate the potential value of a truly international collaboration that addresses:

- *scholarly issues* (selecting the content to be captured and organizing it appropriately);
- *technical challenges* (creating, cataloguing, and storing images of a wide variety of objects, some of them three-dimensional and very large, as well as manuscripts written in many languages, and then developing a database architecture that facilitates searching, “zooming,” and manipulating the contents of the Archive to serve research and teaching needs);
- *legal issues* (defining intellectual property rights as well as rights and obligations of other kinds) in an international context;
- *political sensitivities* (related in large part to the dispersal of an important part of the Chinese cultural heritage and the corresponding need today to reach agreements across many jurisdictions if these scholarly materials are to be reunited electronically); and, finally
- *organizational/business issues* (how the Archive is to be assembled and made available in a manner that facilitates scholarly use while assuring the sustainability of the project).

Daunting as they are, the need to address these issues is an intriguing opportunity to work through basic issues likely to affect the viability of many other art digitization projects.

The Broader “ARTSTOR” Concept

In considering whether to make the large appropriations necessary to create MoMA’s Digital Design Collection and the Mellon International Dunhuang Archive, two important questions were: (1) whether these scholarly resources could be made available to users in a way that met their needs while simultaneously protecting the rights of the content providers; and (2) how the archives could be sustained and could continue to evolve without permanent

underwriting by the Foundation. It would have been hard to justify the expenditure of the funds and the substantial efforts needed to conceptualize and carry out these projects, absent reasonable confidence that the resulting archives could be accessed by scholars worldwide in some satisfactory way—and that resources would be available to make these collections available on a continuing basis, which includes providing for their migration to new technological environments.

The very positive experience of the scholarly community with JSTOR led us to believe that an analogous approach might be useful in addressing these central issues, and the current plan is to use an “ARTSTOR”-like entity to manage and distribute the MoMA and Dunhuang archives. Such an entity might also offer libraries, museums, and other potential users several other significant advantages:

- the convenience of being able to obtain access to more than a single digital art collection from one repository;
- a standard user interface and a single mechanism for providing user services;
- economies of scale in pursuing technical questions, including the continuing development of database architecture;
- a recognized method for monitoring usage and encouraging compliance with legal agreements pertaining to intellectual property rights (and, perhaps, a centralized mechanism for collecting and remitting publication fees);
- a cost-effective way of housing whatever infrastructure is required for these and other purposes; and, finally,
- a “meeting place” for scholars and others interested in these subjects.

The Trustees discussed the “ARTSTOR” concept at length at their retreat in the fall of 1999, concluded that it is promising, and expressed their strong support for investing resources in its further development. At the same time, all involved in these discussions recognize that this new territory is uncharted, that uncertainties

abound, that “ARTSTOR” differs in fundamental respects from JSTOR, that the ideas under discussion are highly preliminary, that there is a need to proceed incrementally and cautiously, and, finally, that it is important not to overreach. We also believe that others need to be involved in thinking with us about these concepts. The comments that follow, which identify a number of questions that are still very much under discussion, are intended, therefore, to inform interested parties of our thinking and to encourage comments and suggestions.

In thinking about how an “ARTSTOR”-like entity might evolve, the most important issues involve the selection of content. There are major differences between the content of JSTOR (which contains standard journal literature that is, among other things, widely held, used in reasonably predictable ways, and added to on a regular basis through the publication of current issues) and the far more amorphous field of art (in which museums and other institutions own a diverse array of unique objects that are of interest to scholars and others for a wide range of reasons). The Trustees are unanimous in their view that the content of the proposed “ARTSTOR” archive should be driven by careful consideration of the needs of scholars, who in turn will be relied on to give the Foundation disinterested advice on the importance of particular fields and collections. The present intention is to be highly selective and not comprehensive. The field is too broad and the costs of creating content are too high. In thinking about the kinds of content that might merit inclusion over the long run, certain basic principles can be proposed. First, a standard of high quality (for example, in image capture, cataloguing, and system design) should be established and maintained. Second, it would be important to avoid the “greatest hits” approach. That is, we would want to avoid a situation in which museums and other content providers alone decided what images to contribute to the database. Broadly speaking, the objective would be to assemble a series of “digital collections,” *each of which would have a clear scholarly integrity and coherence and enough depth as well as breadth to be genuinely useful to scholars.*⁷

⁷ It is conceivable that these individual “collections” might then be complemented by other, more general, scholarly resources that would be useful to teachers and students as well as to scholars. For example, collecting high-quality images of art featured in standard art history texts might be helpful to teachers, and the Foun-

As a practical matter, we are concentrating first on developing the MoMA and Dunhuang “collections” as successfully as possible. As the earlier discussion indicates, this is no modest charge.⁸ These two initial “stakes in the ground” satisfy the principles outlined above, and they should appeal to very different scholarly audiences. We are also in the preliminary stages of examining the possibility of developing a “third stake,” which might consist of an ancient studies project. A well-chosen project of this kind might address some of the same objectives as the first two projects (especially the desirability of enhancing access to hard-to-study monuments, spaces, and related materials that are widely dispersed). An ancient studies project has the added appeal of providing an opportunity to link monuments and art objects to the vast journal literature on classics and classical sites that JSTOR plans to include in its expanded arts and sciences collection. If the proposed “ARTSTOR” experiment were to succeed, we would anticipate adding other suitable “collections” over time.

There are also a great many business and organizational issues to which we would like to direct attention, but with the understanding that many of them are far from resolved. It is difficult to know with any precision what level of costs would be involved in establishing and maintaining a mature “ARTSTOR” entity. Obviously much would depend on the amount of content to be included. We can be sure, however, that the initial costs of digitizing art col-

lation appropriated funds in 1999 to support development of a prototype Academic Image Exchange. Others have proposed attempting to establish an efficient, centrally managed, digital file of slides that facilitates distributed cataloguing. There could be an intriguing opportunity to do useful work here because, as one of our colleagues has noted, “no economy of shared cataloguing practices has developed in this field, as it has in the library field.” These are, however, enormously complicated areas, rife with issues of quality control, technical specifications, intellectual property rights, and financial viability.

⁸Consideration has not yet been given to what might be involved in the fuller development of, for example, a “cluster” of content in architecture and design. It is possible that other funders might want to work with the Foundation in the digitization of substantial portions of important architecture and design collections in various other countries. Similarly, it is possible to imagine digitizing other Asian art that would make the proposed Mellon International Dunhuang Archive even more valuable to scholars. Decisions about all such questions would be made only after Foundation staff had an opportunity to consult scholars and other specialists.

lections will be substantial, largely because of the unique nature of each work of art and the need to capture fine detail (i.e., nature of material, shadow, brush work, color registration, etc.). Thus, the cost of digitizing art objects is likely to be significantly higher than the cost of digitizing text—as our two pilot “stakes in the ground” illustrate so clearly. Moreover, the wider variety of works of art means that there are likely to be fewer economies of scale. As our colleague, Angelica Rudenstine, pointed out in recommending the appropriation to MoMA:

The nature of the materials in the visual arts presents inherent difficulties that are not shared by the print-matter field. Works of art [unlike books and periodicals] are unique to each institution or individual collection, and photography of each item to the requisite level of quality (which may or may not exist for any group of targeted works of art) will therefore always be cumulatively expensive.

It is possible, however, that an entity like “ARTSTOR” could encourage more rapid development of common solutions to some of the main technical problems including image resolution, which, if successful, might yield their own economies. At present, there is a risk that individual scholars and projects will duplicate both the work and the mistakes of others, without adding a great deal of new value. Creating baseline measures of cost for various kinds of digitization might also be useful. In recognition of the “research and development” function that needs to be served in this broad area, the Trustees recently made a grant of \$1 million to the Institute for Advanced Technology in the Humanities (IATH) at the University of Virginia. The grant is intended to accelerate the development of the tools, methods, and procedures needed to manage two- and three-dimensional imagery in the fields of architecture, archaeology, and the visual arts.

In thinking about the revenue side of the equation, a starting assumption is that institutional users (who, initially at least, are expected to be mainly college and university libraries, centers for advanced study, and museums) would make some payment to gain access to the collections in “ARTSTOR,” as they do now to use JSTOR. It is impossible to know what level of user fees would be generated, but it seems almost certain that the revenue-generating capacities of this kind of entity are more limited than are those of

JSTOR.⁹ There is, however, also the distinct possibility that over time parts of this kind of a repository might be of interest to a broader public, including community learning centers and public libraries. Other future possibilities include the development of specialized applications (in distance learning courses, for example) and the granting of access on a controlled basis to some share of the enormous population of individuals who go to museums. The rapid development of Web sites and dot.com enterprises warns against ignoring such possibilities, hard as it is to calibrate their potential role in meeting the costs of maintaining such archives.

The central conclusion we draw from this discussion is that “ARTSTOR” cannot be expected to be self-sustaining if all costs are counted, including the high initial costs of creating digital collections. It seems clear that start-up funding is essential, that some subsidization of even recurring costs could be required, and that if new collections are to be added, significant philanthropic investments in creating content would be required. A major advantage of this model is that decisions to add content can be linked to the availability of funding. Foundations and philanthropically minded individuals exist, of course, precisely to pay for worthwhile things that would not be possible otherwise. All the uncertainties and open questions notwithstanding, we are optimistic that the “ARTSTOR” concept will prove viable.

Intellectual Property Rights

It has been evident for some time that almost every Foundation project involving the application of information technology raises intellectual property rights issues of one kind or another and that in important instances the ability to resolve these issues determines

⁹Whereas JSTOR provides a broad range of content of interest to faculty and students throughout the arts and sciences, “ARTSTOR” would speak mainly to the needs of scholars and teachers in art history and related courses as well as to the needs of some scholars in other humanistic fields like anthropology, history, literature, and area studies who have considerable and growing interest in visual resources. Whereas libraries have been interested in obtaining all the content in JSTOR, it is likely that some schools (and departments) which might be interested in, say, the MoMA Design Collection, would have no interest in the International Dunhuang Archive, and vice versa. This characteristic of a “collection of collections” has obvious implications for user charges.

the very viability of the project. It has been much less evident how these issues should be approached, in part because the law in this area is so unsettled. Even when guidelines exist in the print world, their application in the electronic arena is often far from clear—and hotly contested.¹⁰

Last year's annual report listed broad principles adopted by the Foundation to govern the ownership of intellectual property produced in part with Foundation funds. That first effort to establish ground rules was stimulated mainly by grants to Middlebury's Center for Educational Technology to improve language teaching and, more generally, by grants made as part of the Foundation's program to support Cost-Effective Uses of Technology in Teaching (CEUTT).¹¹ More recently, much time and effort have been devoted to thinking about what principles should govern access to the rapidly growing array of digitized text and images that can be made available on the Internet.

In general, the Foundation favors making access to such materials as broadly available as possible, but in ways that are consistent with the need to meet the ongoing costs of maintaining and enhancing databases. Costs need to be recognized explicitly and covered, in some instances by subsidies and in other cases by site licenses or other kinds of user fees. Many of the world's greatest libraries have a long and honorable tradition of absorbing these costs and making their resources freely available to users, but this

¹⁰ See, for example, the long running debate over the proper definition of "fair use" in an electronic environment. The implications of the *Tasini* decision are also far from clear at this juncture. Of course, the public policy issues related to the ownership and control of intellectual property extend much more broadly. The Science Technology and Economic Policy Board (STEP) of the National Research Council has concluded that an assessment of intellectual property rights policies is timely and that analysis is needed not just of their benefits but also of their costs and unintended consequences. The Foundation is supporting the commissioning of papers that will serve as background for an exploration of these issues by an expert committee led by Richard Levin, president of Yale University, and Mark Myers of the Xerox Corporation.

¹¹ Eight more grants were made in 1999 under this program. Lack of space precludes our discussing these grants in this year's annual report, and it will be more useful, in any case, to review the full "portfolio" of CEUTT projects in a future annual report. Considerable progress has been made by Gilbert Whitaker, Thomas Nygren, and Saul Fisher in encouraging rigorous evaluation of the cost effectiveness of technology-based teaching methods in a wide variety of fields.

model of complete subsidy is not universally applicable. The appropriate structure and mix of subsidy and user charges will vary depending on the circumstances—including the nature of the scholarly resource, the expense of maintaining it, and the sources of funding used to create it. When the Foundation makes grants to assist libraries, museums, and other owners of intellectual property to create digital resources, it expects to reach agreement with the grantees on policies governing the use of whatever new resources are produced. To put the point another way, the Foundation does not make grants to create new intellectual property that the grantee can then exploit in whatever way best serves its own self-interest without regard to broader societal objectives, including the reasonable expectations of scholars.

Since the publication of last year’s report, and as a result of discussions with many experts and a number of grantees, we have learned a great deal about whether, when, and how to reserve intellectual property rights. In light of this experience, the Foundation has adopted a new set of operating principles that include explicit understandings that:

- The Foundation will *not* assert intellectual property rights when: (a) its investment in a project is *de minimus*; (b) the Foundation has no special interest in the subsequent pricing or distribution of a product developed with Foundation funding; and/or (c) the assertion of intellectual property rights would create harmful disincentives for grantees.
- The Foundation *will* reserve rights with respect to pricing, use, distribution, and/or revenue-sharing when: (a) its investment is substantial; (b) an objective of the grant is to promote wide and equitable access to the intellectual property being developed; (c) the property in question can be usefully incorporated in, or linked to, other projects the Foundation is funding; (d) the Foundation is contracting out for the development of a specific product or is the principal architect of the product; and/or (e) significant revenues are anticipated which may be usefully applied to other projects.

We have also learned some “process” lessons. In particular, we now undertake to identify and resolve intellectual property rights issues early in the grantmaking process. In the case of some early

grants related to the development of JSTOR, we were slow to address issues related to the ownership and control of software that was being developed, and the result was much confusion and the need later to spend considerable time fixing problems that never should have arisen in the first place. Grantees clearly deserve to know the Foundation's intentions and requirements at the outset of an agreement to undertake a Foundation-sponsored project.

These operating principles and an effective process for applying them were developed by Michele Warman, the Foundation's recently-elected General Counsel and Secretary, working in concert with other Foundation staff. Intellectual property rights issues are proliferating at the Foundation, and this is clearly an area in which there is simply no substitute for having excellent staff members "in house." It is no exaggeration to say that the Dunhuang project, for example, could not have gone forward without the day-to-day involvement of Ms. Warman and the Foundation's Assistant General Counsel, Gretchen Wagner.¹²

The art digitization projects in which the Foundation is involved have raised the most complex kinds of intellectual property rights issues, and one useful by-product of the extended discussions with the Chinese authorities has been valuable experience in thinking through issues which lack off-the-shelf solutions and which are certain to arise in many other contexts. In the case of both the MoMA and Dunhuang projects, the Foundation indicated from the start that it would be able to provide funding only if the grantees and other participating entities were comfortable giving the Foundation (or a designee such as "ARTSTOR") rights of two basic kinds:

- *First, the royalty-free right to incorporate the "collections" of digitized images and other content in an archive of the Foundation's creation (for which the Foundation would seek a "compilation copyright").* In the case of the Dunhuang project, this means the right to include in the Mellon International Dunhuang Archive not only images of the Dunhuang cave art, but also images and text obtained from the many other places that hold materials

¹²In the case of the Dunhuang project, we also want to acknowledge the invaluable help provided by Nico Howson and other lawyers at the Paul Weiss firm, both in New York and Beijing, and by June Mei who has done so much to facilitate mutual understanding between Foundation staff and the Chinese authorities.

that once were at Dunhuang, and to be able to provide the tools that will allow scholars to link or “reconnect” these materials to the images of the cave paintings. More generally, the Foundation, acting reasonably, has to have the right to assemble collections of various kinds under a single “ARTSTOR” umbrella.

- *Second, a royalty-free license to distribute the digital archive worldwide to civic, educational, and charitable entities on terms that it regards as appropriate and consistent with its educational objectives.* The Foundation itself is ill-equipped to serve the distribution function, and it needs therefore to be able to select a distributor and to assure the distributor that it will not have to pay royalties for electronic content that the Foundation has helped to create.

At the same time, the Foundation also seeks to protect the legitimate rights of the content providers (MoMA and the Dunhuang Research Academy, in these cases). Specifically, MoMA and the Dunhuang Research Academy will be the sole owners of the master images of their art, which they are free to use as they see fit, for educational or commercial purposes. In addition, the Foundation (or its designee) will take appropriate steps to protect the rights of the content providers: (1) only licensed users will be given access to the “ARTSTOR” archive; (2) carefully constructed user agreements will regulate the ways in which the images can be used and will facilitate the normal payment of fees for the reproduction of an image in a scholarly publication;¹³ and (3) “ARTSTOR” will monitor (as JSTOR does now) the electronic use of its archive in order to detect any unusual patterns of use that might suggest, for example, the improper downloading of large numbers of images.

While working out the details of agreements of this kind is difficult and time consuming, experience to date is encouraging. When there is a shared set of objectives, trust, and mutual respect,

¹³ Another level of protection is provided by the practice of most scholarly publishers, who require authors to sign statements attesting that they have secured permission from the owner of an image to reproduce it. We would also expect to display statements of rights and obligations concerning use of the images in the Archive, and to include forms that will make it as easy as possible to comply with the terms of use.

it is possible to reconcile the multiple interests of participants. This is perhaps the most important lesson we have learned through these negotiations.

Academic Libraries in a Digital Age

The library component of this “program” is, if one counts its antecedents, the oldest one, dating back to the 1970s, when my predecessor, Jack Sawyer, led an initiative designed to encourage collaboration and resource sharing among libraries. The Foundation’s much more recent investments in reinvigorating and linking library consortia in Eastern Europe and South Africa are a quite direct extension of what was at its time path-breaking work in building incipient library networks. Partial evidence of the extent of this activity in the US is provided by the history of the Foundation’s support for The Council on Library and Information Resources (CLIR) and its predecessor organizations, the Council on Library Resources and the Commission on Preservation and Access. These entities have been grantees since 1976, and had received a total of over \$16 million prior to the most recent grant of \$2.6 million. Since its inception, CLIR’s primary audience has been the research library community. CLIR has sought to assist leaders at universities and other research institutions in understanding library and archival issues and to enable them to make well-informed decisions about the future. Those activities continue, at the same time that CLIR has adopted a broader agenda.

In 1999, the Foundation’s principal focus in the library field was on liberal arts colleges. In December alone, the Trustees approved appropriations totaling \$3,475,000, which was designed to strengthen the role of the library on liberal arts college campuses. Grantees included several consortia (the Five College group based in Amherst, the Associated Colleges of the South, the Five Colleges of Ohio, based in Gambier, and the Bryn Mawr/Haverford/Swarthmore group), several individual colleges (Carleton, Reed, and Vassar), and one service organization (CLIR).

This set of grants grew directly out of a series of meetings Foundation staff had with presidents, provosts, and librarians from selective liberal arts colleges, who expressed concerns about the changing role of the library on their campuses. Broad, philosophical concerns are joined to two highly practical issues.

- First, many institutions continue to run short of space for books and are interested in designing useful off-site storage facilities that might be shared with other institutions. Individual institutions (especially large universities) have used off-site storage for a long time, but now there is growing interest in collaborative approaches to this problem. The Five College group based in Amherst has converted a former US Air Force Strategic Command headquarters (a two-story bunker, built 32 feet under the surface of the Holyoke mountain range) into a Five Colleges Depository for off-site storage.
- Second, ways clearly need to be found to ensure that library and technology staff maintain the necessary skills to perform well in this new electronic environment. The grant to CLIR will allow promising mid-career librarians and technology staff at liberal arts colleges to attend the Frye Leadership Institute at Emory University. This Institute, named most appropriately in honor of Billy Frye, a long-time champion of libraries and librarians, exists to educate leaders to meet the challenges of managing hybrid systems of print and electronic information, establish programs supporting both traditional and new modes of scholarship, and communicate effectively about the choices available to the campus community.

More fundamental challenges arise from the advent of the technologies themselves, the availability of information in electronic form and the growth of personal computers on campuses—all of which make it possible for students and faculty members to conduct research from their dormitory rooms and offices. Notwithstanding this wealth of new information and the new modes of access to it—and perhaps even because of these “enhancements”—presidents report that faculty members believe that their students’ research skills have deteriorated. The presidents feel frustrated in their efforts to involve faculty, students, librarians, and technology staff in redefining the role for the library in a fast moving electronic environment. Many librarians express their own frustrations, derived principally from their view that faculty have not been effectively engaged in the new opportunities the library can provide to enhance teaching and learning on campus.

The colleges and consortia that received these grants are

addressing this range of issues in a predictably wide variety of ways. Getting people to “cross boundaries” can be surprisingly difficult, even in small, rather intimate settings; what works on one campus may not work at all in a seemingly comparable institution. Perhaps the most ambitious of these efforts to give the library a new intellectual role on campus is occurring at Vassar, which is nearing the completion of a major renovation and addition to its library. This renovation will include new settings for instruction using electronic technologies that are designed to strengthen the intellectual connections between the classroom and the library and to foster active collaboration among faculty, librarians, and technology staff within the library. The new facilities include a large computer classroom, an electronic seminar room, five electronically equipped group study areas, and a media cloister. The cloister will house the college’s existing Center for Electronic Teaching and Learning and will be used to integrate technology resources across the campus as well as provide professional support for the use of advanced technologies for teaching, learning, and research. Vassar’s overarching objective is to reestablish its library as the intellectual center of the campus in the era of new technology.¹⁴

The presidents and librarians say over and over again that exchanging ideas and experiences with one another is extremely valuable. The staff member at the Foundation organizing these discussions is Pat McPherson, and she and her associates intend to work closely with these institutions to bring key participants together to assess progress and consider future directions in an environment that is far from stable.

Some commentators believe that the forces that serve to “liberate” individuals from dependence on physical locations such as libraries are gaining strength rapidly. They cite as evidence the development of new Web sites and portals aimed directly at students and other consumers of academic information, and the belief of some commercial entities that there is money to be made in these ways. The Foundation itself has encouraged a kind of “liberation”

¹⁴ Many other academic institutions have redesigned their libraries in recent years to take advantage of the same technological advances that have motivated the new library construction at Vassar. Many of the guiding principles emerged at the University of Southern California in the late 1980s and early 1990s. The new Emory University library is another excellent example of work of this kind.

by developing resources such as JSTOR that reside on servers at centralized locations and are just a mouse click away. At the same time, there is the danger that the ready availability of electronic resources will lead to more intellectual isolation. A central challenge for libraries and librarians, some of us believe, is to become ever more effective in managing access to the new digital resources. This major responsibility involves deciding how to evaluate various digital offerings, how to consolidate and synthesize them, and, in effect, how to turn them into knowledge. Even more so than in the past, librarians must become both effective teachers of research methodologies and active participants in the shaping of courses and curricula.

Libraries should also, in this view, remain both physical and symbolic centers of intellectual life on campus—places where it will still be possible to hold a book that has become an old friend in one's hand and to contemplate how little of the accumulated knowledge of times past any of us can command. Libraries should remain places where faculty and students with diverse interests come together to celebrate shared enthusiasm for that greatest of all gifts, a new idea.

William G. Bowen
February 16, 2000

THE FOUNDATION'S PROGRAM ON REFUGEES AND FORCED MIGRATION

Carolyn Makinson

Program Officer for Population and Forced Migration

The main purpose of this report is to provide a comprehensive description of the Foundation's activities in the field of refugee studies and forced migration. The report begins with an explanation of the events surrounding the Trustees' decision to establish a program in this field and with a summary of our earlier grants that drew attention to the needs of refugees for reproductive health services and established the Reproductive Health for Refugees Consortium. It ends with a brief discussion of planned future changes in both the Foundation's refugee and population programs.

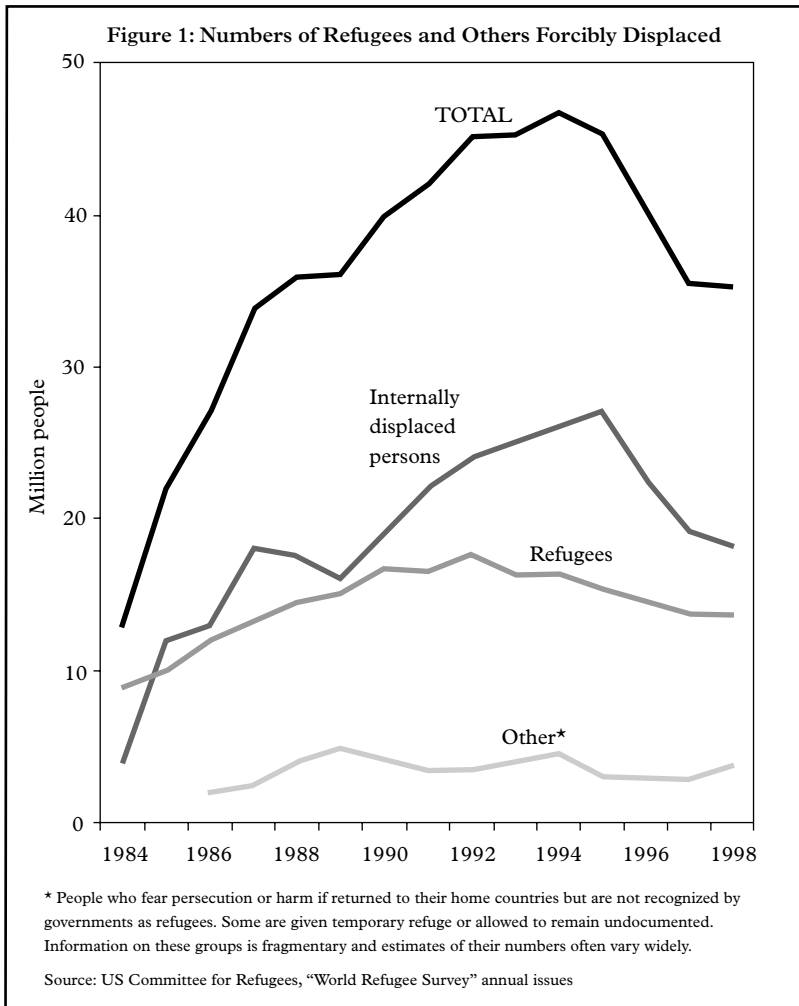
Background

In 1994, with encouragement from John C. Whitehead, then Chairman of the Board of Trustees, the Foundation began to explore the possibility of developing a program in the field of refugee studies and forced migration. The Trustees made the decision to move ahead in mid-1995. Four major considerations influenced this decision:

- (a) the problem of forced displacement had grown exponentially in scale during the preceding few years and seemed likely to remain significant in the foreseeable future (*see* Figure 1);
- (b) despite the increased scale and importance of the problem, the field of relief and humanitarian assistance remained rather *ad hoc* in its approach, with high staff turnover, almost no professional training, scant attention to research, and virtually no established research and training institutions that could ameliorate this situation;
- (c) the relief and humanitarian field in the US was dominated by a few key players (*e.g.*, CARE, Catholic Relief Services, the

International Rescue Committee [IRC], Save the Children Federation) and it therefore seemed feasible for the Foundation to strengthen the field by improving the policies, practices, and professionalism of these few organizations; and

(d) the Foundation was well placed to make a major contribution to the field by concentrating on its traditional areas of activity—namely, the development of university-based centers of research and teaching, and the building of a knowledge base for the field.



At the inception of the program, staff reviewed the past funding provided to the field by foundations and other potential donors. In contrast to the population field, which had always received substantial foundation support, the humanitarian field drew its assistance largely from governments and individual donors. And foundation support—such as it was—was concentrated in two areas: meeting the needs of refugees and immigrants in the US and Israel (a variety of foundations), and studies of conflict resolution, world security, and international cooperation (chiefly the MacArthur Foundation and the Carnegie Corporation). Only the Pew Charitable Trusts and the Ford and Joyce Mertz-Gilmore Foundations had addressed the needs of the vast majority of refugees who remained in developing countries.¹ The general absence of foundation interest was likely to prove an obstacle to raising standards in the field, since governments and individual donors wished their funds to be directed towards meeting the immediate needs of refugees, rather than towards the long-term goal of strengthening the capacity of institutions to generate and use knowledge to improve performance.

Another predisposing factor was the great interest that staff encountered from the major humanitarian organizations to improve their performance through applied research and training. Prior to the Trustees' decision, staff had solicited the views of numerous representatives of humanitarian organizations, the UN, the US government, foundations, and research groups as to the needs they would like the Foundation to address. There was a remarkable degree of consensus, regardless of organizational sector, that the greatest need was for support to improve standards. Specifically, five somewhat overlapping priorities were identified: (a) strengthening the capacity of relief organizations in emergency preparedness and prevention, and in rapid response; (b) improving overall technical standards in the field; (c) development, implementation, and evaluation of relief programs that considered long-term aspects of refugee situations, and contributed to permanent solu-

¹ Since 1996, Pew's refugee program has closed and Joyce Mertz-Gilmore's has been substantially reduced in size. Ford's program has a different—but complementary—emphasis than Mellon's, focussing on human rights, advocacy, and strengthening the capacity of institutions within the regions experiencing refugee flows.

tions; (d) increasing the capacity of indigenous non-governmental organizations, and of refugees themselves, to develop and implement programs; and (e) policy studies to lay the groundwork for needed changes in the field in both policies and programs.

Of these five potential areas of focus, the Foundation's program has so far concentrated on the first three. In brief:

- The Foundation's awards for revolving emergency funds were designed to improve emergency preparedness and rapid response.
- A main thrust of the program to date has been improving technical standards.
- Some initiatives are beginning to examine long-term approaches to refugee problems—for example, applied research on social and psychological programs, and on programs for refugee children and adolescents, described below.
- In general, the Foundation does not believe it is well placed to provide direct support to organizations in developing countries, although it might play a role in the future in enabling US universities and humanitarian organizations to improve their collaboration with indigenous partners.
- The Foundation has focused on the needs of practitioner organizations and has retained a strong field perspective. Research themes have therefore been selected because of their potential to improve either the technical quality of relief programs or the operational decisions of humanitarian organizations. Very little support has been provided for studies designed to influence government policies or to educate the general public.

Prior to implementation of the new program, the Foundation provided support for its program officer to spend six months in the field, gaining first-hand experience of refugee settings. The IRC and Save the Children hosted lengthy visits to Guinea, Mozambique, Rwanda, and the camps in Tanzania for Rwandan refugees. The insights gained during these visits have proved invaluable in developing the Foundation's program.

*Reproductive Health for Refugees—
the Foundation's First Awards in the Refugee Field*

Before the Foundation's establishment of the refugee program, grants had been made in support of reproductive health for refugees through the Foundation's population program. Indeed, it was in devising and monitoring the reproductive health grants that Foundation staff became aware of the very great needs in the field of humanitarian assistance that the Foundation could address.

Although the Foundation's population program focuses mainly on university-based research, grantmaking initiatives are sometimes developed in relation to the delivery of services if areas of need are identified that are ignored by larger donors, such as USAID and the United Nations Population Fund. The IRC's Women's Commission for Refugee Women and Children first drew our attention to the virtual absence of reproductive health services in refugee settings and the great need for such services. Several factors were responsible for the absence of services: a mistaken belief that refugee situations were short-lived and chaotic—most refugees live for years in relatively stable, but impoverished, circumstances; a belief that refugees would themselves give low priority to reproductive health services, a view which has proven unfounded (although refugee groups differ in the specific services they most desire); and a reluctance on the part of donors and humanitarian organizations, many of which were religiously based, to deal with an area that was controversial and that could raise difficult philosophical and ethical questions.

In early 1993, a grant was made to the Women's Commission to conduct a field assessment of the need for reproductive health services in refugee settings and to document what services were already being provided. A report was published, which received widespread attention.² In August 1994, the Foundation invited several organizations, drawn from both the family planning and the humanitarian fields, to form a consortium to address this issue. In March 1995, the Trustees approved awards totaling \$1.6 million to the Reproductive Health for Refugees Consortium, comprised of CARE, the IRC, John Snow International, Marie Stopes International, and the

² Deirdre Wulf, *Refugee Women and Reproductive Health Care: Reassessing Priorities*, Women's Commission for Refugee Women and Children, June, 1994.

Women's Commission for Refugee Women and Children. A grant was also made to the World Health Organization to produce technical and managerial guidelines.³ Altogether, from 1993 to 1998, the Foundation appropriated awards totaling nearly \$3 million in support of reproductive health for refugees. A recent report published by the Consortium documents the progress that has been made over the past five years, and the next steps that need to be taken.⁴

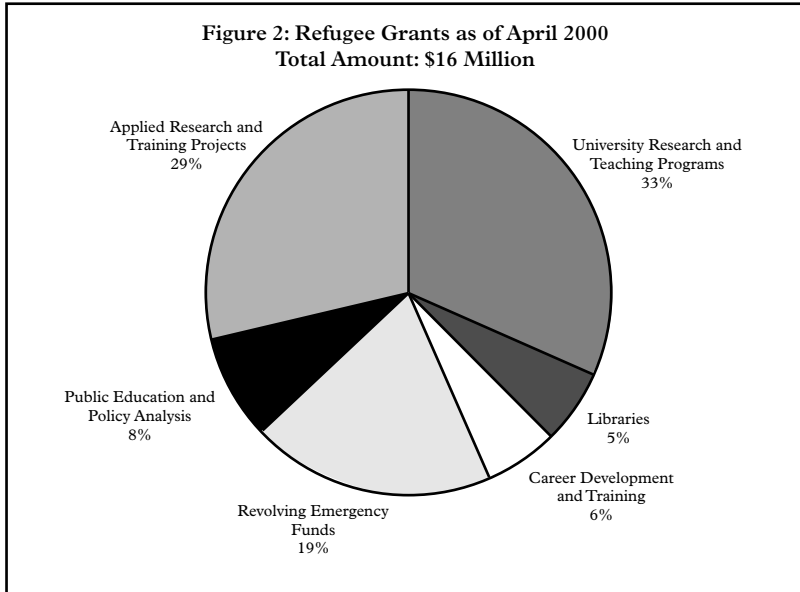
*The First Three Years of Mellon's Program
on Refugees and Forced Migration*

Since December 1996, grants totaling \$16 million have been awarded in the refugee program. (Grants for reproductive health are not included in this total, since these were awarded in the Foundation's population program.) Figure 2 shows the distribution of funds by sub-program. The two largest categories (each slightly less than one-third of total dollars awarded) are support for university research and teaching programs, and for applied research and training conducted jointly by academics and practitioners. We expect the proportion allocated to these two categories to increase in the future since it is unlikely that additional awards will be recommended for revolving emergency funds.

It was intended that the various elements of the program would be mutually reinforcing: that the new academic programs would graduate both future analysts for the field and better trained practitioners; that the applied research and training programs would yield findings that would be incorporated both into teaching curricula and into the policies and practices of humanitarian organizations; and that the constant exchange between the academic and practitioner worlds would ensure that practice was grounded in sound theoretical frameworks and systematic empirical evidence, and that academic research and teaching would be relevant to the needs of policy and practice in the field.

³World Health Organization, *Reproductive Health During Conflict and Displacement: A Guide for Programme Managers*, Geneva, 2000 (WHO document number WHO/RHR/99.16).

⁴Reproductive Health for Refugees Consortium, *Refugees and Reproductive Health Care: The Next Step*, 1998.



Our general assessment is that the program has been a great success, in part because its timing was exceedingly fortuitous. The Foundation's entrance into the field coincided with a renewed commitment among practitioner organizations to improve their performance, and a new interest among universities to develop research and teaching programs in the field of humanitarian assistance. Despite the extreme time pressures under which they work, the practitioner organizations have remained eager to participate in the program and to find ways to forge closer alliances with academic groups. In the past few years, there have been several notable developments aimed at improving the standards of humanitarian assistance. The Sphere project was initiated in 1997 by two networks of practitioner agencies, InterAction and the European-based Steering Committee for Humanitarian Response. Its aim has been to develop a humanitarian charter and an associated set of minimum standards in sectors such as nutrition, water and sanitation, health, and shelter.⁵ InterAction itself is discussing among its membership whether to adopt formal procedures for certifying that

⁵The Sphere Project, *Humanitarian Charter and Minimum Standards in Disaster Response*, Geneva, 1998.

member organizations are in compliance with its standards. And the US government is increasingly providing funds for the development of training curricula and the establishment of training programs.

A greater surprise for us has been the enthusiasm for the Foundation's program within the academic community. At the time of the original recommendation to the Trustees that the Foundation establish a program (March 1995), very few universities provided course offerings on refugees and humanitarian assistance, and there appeared to be relatively little interest in doing so. In the intervening years, programs have sprung up all over the place, often in response to demand from students. In contrast to our original expectation that we would have to "sell" the idea of refugee studies to universities, we have received more requests for assistance in establishing new programs than we can handle—and often from excellent universities. Almost without exception, the university programs that the Foundation has chosen to support have flourished—in terms of student enrollment, approval of teaching curricula and degree programs, research output, links to practitioner organizations, and growth in external funding. The main obstacle to progress to date has been the shortage of trained analysts in this field who can assist with all the training and research needs that are being identified—precisely the needs that our program is designed to address in the long run. There has also been a notable—and gratifying—degree of collaboration among the various organizations supported in the Foundation's program.

There follows a brief description of activities supported for each of the sub-program areas.

University Research and Teaching Programs

The Foundation has provided support for the establishment of three new university-based programs at Columbia, Tufts, and the University of the Witwatersrand in South Africa, and for the strengthening of the major pre-existing refugee studies program at Oxford University in England. All four programs have made major strides in the past three years; all four have strong links with practitioners.

Oxford's Refugee Studies Centre (RSC) was established in 1982 (and was known, until its recent name-change, as the Refugee Studies Programme). In January 1997, the RSC successfully navi-

gated a difficult leadership transition when the founding director, Barbara Harrell-Bond, retired. It has continued to prosper under its new director, David Turton. It has acquired two permanent endowed academic posts and—with encouragement from the University administration—is seeking to raise endowment for two additional posts. In 1998, it received the first intake of students for its new, nine-month Master's course in Forced Migration, which is receiving large numbers of applications from around the world. Its current research portfolio has attracted \$1 million annually in external funds—50 percent more than four years ago. It has completely overhauled the curriculum and pedagogy of its well-known summer school for practitioners and plans to double the number of participants (to 80) over the next two years.

Tufts University's Feinstein International Famine Center was established in July 1996 in the School of Nutrition Science and Policy. From the outset, the Center has received very strong support from the President of the University and from the Deans of the School of Nutrition and of the Fletcher School of Law and Diplomacy. Under the leadership of its director, John Hammock, the Center's annual budget has grown from \$200,000 three years ago, to \$1.2 million in 1999, and a projected \$1.8 million for the year 2000, and its sources of support are well diversified. It has already established two endowed chairs in humanitarian studies, raised an additional \$2.5 million in endowment for the Center, initiated a joint Nutrition School/Fletcher School Master's in Humanitarian Assistance, developed a research program in various areas of humanitarian assistance, evaluated field programs and policies, conducted training workshops at the request of USAID and UN agencies, and hosted visiting fellows sponsored by these agencies. The Center is currently discussing future collaborative activities with the University of the Witwatersrand, including exchange visits by faculty members.

Columbia University's Program on Forced Migration and Health was established in 1997 with support from the Foundation. Columbia has recruited two senior staff members to lead the program and has developed a new concentration on refugees and displaced populations in its Master's of public health (MPH) program, in which 10–15 students enroll each year. It has been awarded a major contract by the US Office of Disaster Administration (OFDA) to provide the officially approved health training for practitioners work-

ing in emergency assistance, and has received awards from the Ford, Gates, and Packard foundations. It has been invited to join the Reproductive Health for Refugees Consortium (the first academic organization to do so) and has received a \$3 million award from the Packard Foundation for research in collaboration with the Consortium. And it is the academic collaborator most sought out by US humanitarian organizations that offer medical and public health services. Columbia's program has especially strong ties with the IRC, including the joint appointment of two medically trained staff members. The director of the program, Ronald Waldman, is a leading participant in the roundtable on forced migration established by the National Academy of Sciences with support from the Foundation. In the future, the program hopes to expand its OFDA health training to additional sites outside the US, and discussions are proceeding with the University of the Witwatersrand to see if it might be an appropriate collaborator for the training of practitioners in Africa.

With Foundation support, the *University of the Witwatersrand* has established a Forced Migration Programme which is hosted jointly by the Graduate School for the Humanities and Social Sciences and by the Department of Community Health. The University has recruited a coordinator for the program, Zonke Majodina. The program's one-year Master's degree has been approved by the University and is scheduled to begin in February 2000, and it has offered a weekly seminar series that has been well attended, especially by practitioners and the general public. Mechanisms have been developed to stimulate relevant research among faculty members and students, and the University is actively engaged in discussions with a number of institutions supported by the Foundation (e.g., Columbia, Oxford, Tufts, the London School of Hygiene and Tropical Medicine) regarding possible collaboration in the future. The University of the Witwatersrand has also been asked to host the seventh conference of the International Association for the Study of Forced Migration, which will take place in January 2001.

In addition to these major investments, the Foundation has provided support for *Brown University's Humanitarianism & War Project* (which is moving to Tufts University in July 2000), and for the *Inter-University Committee on International Migration at the Massachusetts Institute of Technology* (whose members include Boston, Harvard, and Tufts Universities, and Regis and Wellesley

Colleges). These programs have been very successful in generating research and collaboration with practitioner organizations, and with the UN High Commissioner for Refugees (UNHCR).

The Foundation has made very recent awards to two other promising groups. *Georgetown University* has recently established an Institute for the Study of International Migration, which is based in the Edmund Walsh School of Foreign Service and is affiliated with the Georgetown University Law Center. It intends to focus on refugee law and protection and, in collaboration with the Brookings Institution, on the welfare of internally displaced populations—which are not generally accorded the same recognition and assistance as refugee populations displaced across a national boundary. *The American University in Cairo (AUC)* has established a one-year postgraduate diploma in forced migration and refugee studies. It also intends to collaborate with AUC's Social Research Centre to conduct research on the many Sudanese and Somali refugees who live in urban areas of Egypt.

Libraries

Oxford's Refugee Studies Centre has assembled the most comprehensive library collection on refugees and forced migration in the field. In 1996, the Foundation made an award of \$500,000 for the digitization of the RSC's documentation center. Our intention was to ensure that emerging academic centers, including those in the developing world, would have access to RSC's collection. The project is now the largest digital library project at Oxford University and has attracted additional funds from the European Union. There has been excellent cooperation among the centers supported by the Foundation. Oxford, Tufts, and Columbia are discussing how best to develop a joint approach to the acquisition of materials, digitization, and production of a unified database; the University of the Witwatersrand expects to gain access to the digitized database as it becomes available; and Tufts and Oxford recently collaborated in holding a workshop at Tufts on digital libraries. As well as the digitized library, Oxford also intends to make available over the World Wide Web distance learning packages (including some being produced with Foundation support), and multi-media archives of images, film video and sound.

Applied Research and Training Projects

Awards have been made to bring together academics and practitioners around various topics within humanitarian assistance. Topics have been chosen, in consultation with humanitarian organizations, for a variety of reasons:

- because they were important spheres of activity in terms of UN and government funding but lacked serious evaluation research (health and psychosocial programs);
- because humanitarian organizations expressed a need for greater technical training of staff (health and international law); or
- because there was a clear need for new approaches in designing policies, procedures, and/or interventions (refugee demography, international law, and refugee children and adolescents).

Refugee Demography. With support from the Foundation, the Committee on Population of the National Academy of Sciences has established a roundtable on forced migration, which brings together investigators and practitioners from the fields of demography and humanitarian assistance. For a variety of reasons, estimates of stocks and flows of refugees and other forced migrants are known to be inaccurate. Moreover, the estimates that exist are of the most simple kind. Little is known about the typical age and sex structure of refugee populations; even less about their birth and death rates. Without this information, it is hard for relief workers to plan programs, monitor the condition of refugees, and allocate resources effectively.

The roundtable is expected to develop a research agenda and stimulate research to achieve a better understanding of population dynamics before, during, and after emergency situations. A meeting on mortality and morbidity in refugee settings has already been held. Future meetings may be held on topics such as fertility and reproductive health in refugee settings, age and sex composition of refugee populations, and patterns of flight and resettlement.

An award has also been made to the Johns Hopkins University to develop a field manual to help humanitarian workers collect and analyze basic demographic data in humanitarian settings. Demog-

raphers and health specialists at Johns Hopkins have already worked together to conduct a study of mortality in North Korea, which has recently been published in *The Lancet*.

Refugee Health. Public health and medical programs are among those most frequently undertaken by humanitarian organizations and certainly those that require the most technical expertise. In recent years, there has been growing recognition that very large numbers of refugees have died needlessly because incorrect medical decisions have been made—for example, because of failures to set priorities among health tasks, stockpile appropriate supplies, and follow best practices. Spurred on by this recognition, InterAction obtained support from OFDA to develop a health training curriculum for practitioners. As noted above, Columbia’s program on forced migration and health has been awarded the OFDA contract to conduct training courses using the new curriculum. Despite shortcomings in current practice, refugee health has been the sector with the greatest university-based capacity to absorb Foundation funds for research and training.

The Foundation has provided support to two universities—Columbia and Johns Hopkins—to develop research and teaching programs on forced migration and health. Two additional awards have been made for partnerships between a university and a medical relief organization (Columbia and the IRC; and MERLIN, a UK medical group, and the London School of Hygiene and Tropical Medicine). In both cases, the partners proposed to make a joint appointment of a medical practitioner who would conduct experimental research in emergency settings, help the practitioner organization to incorporate research findings into its policies and programs, and offer training to staff members. Awards were also made to enable three other practitioner organizations (CARE, International Medical Corps, American Refugee Committee) to seek technical assistance from the US Centers for Disease Control and university-based groups, and for Columbia to conduct a review of research findings in the refugee health field.

Social and Psychological Programs for Populations in Crisis. There is growing recognition of the need for humanitarian agencies to concern themselves with the psychological well-being of those they seek to assist and with the rebuilding of social institutions that will be necessary for any kind of “normal” life to resume. Before reaching safety, survivors are likely to have witnessed atrocities, to have

suffered violence themselves, and to have lost close family members. They are then faced with rebuilding their lives—whether in a camp or elsewhere—in impoverished circumstances and without the economic and social structures to which they were accustomed. Children as a group are of special concern: many have lost their parents and some have been recruited as child soldiers and forced to commit atrocities themselves. Settlement in another country requires a process of adaptation that can be difficult enough when it is voluntary and accomplished under the best of circumstances. Repatriation to the country of origin brings with it constant reminders of what has been lost and often necessitates some kind of reconciliation or accommodation with the erstwhile enemy.

The focus of social and psychological programs has changed over the past 60 years. Until recently, research had been conducted primarily among refugee populations who had resettled in industrialized countries, first after World War II when refugees were presumed to share the same cultural background as the host population, later after the conflicts in Southeast Asia when greater attention was paid to the need for cultural adjustment. In the last few years, the focus has shifted to the needs of the much larger populations, usually from developing countries, who remain in the regions of conflict and require assistance under the most difficult circumstances.

Donors have shown increased willingness to provide funds for what are known as psychosocial programs; one survey identified 185 such projects within Bosnia and Croatia alone. Yet there are several problems associated with programs currently implemented in this field. Many programs use concepts, measurement instruments, and approaches that have never been validated and tested in the settings in which they are now being applied. Few of the practitioners who devise and implement the programs have adequate training. And there is seldom any systematic evaluation of the outcome of program interventions.

Moreover, progress in establishing a firmer base of knowledge for the field is being impeded by its polarization between proponents of two different approaches—one emphasizing individual mental health, the other emphasizing social reconstruction and community-based programs. The first approach builds on the concepts, diagnostic tools, and practices of Western psychiatry and psy-

chology. Proponents of the second approach point to the limitations of such interventions, which may be inappropriate for non-Western cultural settings, and are unlikely—on practical grounds—to reach the large numbers of people who need assistance. Very little rigorous research has been conducted among refugee populations to substantiate the strongly held views of proponents of either approach.

To date, the Foundation has provided support for three initiatives to ameliorate this situation.

- The University of Pennsylvania has established a center for the study of ethno-political conflict within its psychology department. The center aims to stimulate research in this area within the field of psychology, and to train a new generation of scientists and practitioners to study the causes and consequences of ethno-political conflict and to work in complex emergencies, initially through a postdoctoral training program. The center has run its first summer training program with support from the National Institute of Mental Health. Five graduates of the summer program are spending a year as research fellows at Penn and are conducting field research at sites in South Africa, Israel/Palestine, Nigeria, and Sri Lanka. The center has recently been awarded \$1.5 million for use over four years by anonymous donors, which will support the center's director and 3–4 postdoctoral fellows a year.
- Oxford's RSC has developed a module to train practitioners in three areas: (a) theoretical understanding of trauma across different cultural settings; (b) evaluation of psychosocial programs through measurement of specified and measurable outcomes; and (c) planning and implementing programs in the field, based upon emerging best practice. Parts of the module have already been tested in RSC's summer school and in Sri Lanka through a Sri Lankan federation of mental health organizations. The final module is expected to be ready for dissemination this year (2000), and will be placed on the RSC's Web site. The RSC intends to form a collaborative network of seven institutions that will train practitioners using the module, including Columbia and the University of the Witwatersrand.

- Awards have recently been made to several academic and practitioner organizations with a variety of viewpoints (Queen Margaret University College, Edinburgh; Oxford and Columbia Universities; Christian Children's Fund; the IRC; and Save the Children) to begin the following tasks: (a) the development of a unifying framework setting out what is known about major stressors in situations of forced migration and the characteristics of those most likely to be vulnerable to trauma, the assessment of psycho-social needs among displaced populations, and the kinds of interventions that might be implemented either through the health-care system or through community-based programs; (b) an inventory and assessment of what already exists in the field in terms of training materials, manuals, instruments for data collection and analysis, and reports on field interventions; (c) the identification of priority areas for research; and (d) the implementation of a few small-scale pilot studies to assess the appropriateness in specific situations of particular kinds of approaches.

Refugee Children and Adolescents. Given that most refugees originate in developing countries, which have young populations, at least half those displaced by conflict are children and adolescents. Yet, little attention has been paid to the special needs of refugee children and adolescents. And even those programs specifically aimed at children—for example, programs to trace and reunite separated children with their families—have rarely been subject to serious evaluation.

Some needs of children will be addressed through research on health, psychosocial programs, and refugee education. But awards have also been made for research on other issues related to children. Save the Children received support to hire a senior staff person, previously a faculty member at Duke University, to strengthen Save the Children's capacity to conduct and use research, and to offer technical assistance to field programs. Academic-practitioner partnerships (between Duke University and Save the Children, and Randolph-Macon College and the IRC) are conducting research, respectively, to evaluate different interventions to help demobilized child soldiers return to their families and communities, and to analyze a database in southern Sudan that was used to reunite unaccompanied children with their families and to monitor their wel-

fare. Oxford University has received support for two initiatives: a two-year research fellowship to review the thinking behind current policies and programs and to explore academic research on children for relevant new perspectives; and a comprehensive research study on the situation of Palestinian children and adolescents throughout the Middle East.

As a recent study by the Women's Commission for Refugee Women and Children points out,⁶ adolescents are often the most neglected group of all. Less obviously in need of protection than younger children, their transition to adulthood has nevertheless been interrupted, and they are especially vulnerable to despair and exploitation, in the worst cases as soldiers and prostitutes. Education programs rarely cater to adolescents, and they are generally excluded from micro-credit programs aimed at adults. With Foundation support, the Women's Commission surveyed donors, practitioner organizations, and academics, produced an inventory and assessment of past and current policies and programs that serve adolescents displaced by conflict, and created a comprehensive bibliography. The study describes trends in five key sectors that affect refugee adolescents (education, livelihoods, health, psychosocial programs, and protection) and summarizes the relevant international conventions and the activities of the main organizations responsible for adolescent welfare. The results of the study will be used to appeal for greater attention to adolescents affected by war, and to develop an agenda for applied research.

International Law, Human Rights, and Humanitarian Assistance. Since the end of the Cold War, the nature of international conflict has changed and so, too, have the conditions in which humanitarian agencies attempt to protect and assist refugee populations. Formerly, such agencies were regarded as neutral, their autonomy was respected, and they were generally granted safe access to assist non-combatants. Other than the International Committee for the Red Cross, they usually assisted refugees in camps in neighboring countries at a safe distance from the conflict. Currently, conflicts are primarily internal, civilians are often the intended victims and are manipulated for military purposes, humanitarian principles and human rights norms are violated with alarming regularity, and

⁶Women's Commission for Refugee Women and Children, *Untapped Potential: Adolescents Affected by Armed Conflict. A Review of Programs and Policies*, 2000.

humanitarian organizations are often perceived as—and sometimes become—parties to the conflict.

Increasingly, such organizations have to weigh whether their presence causes more harm than good—for example, by introducing large-scale material resources that often reach the wrong hands, providing legitimacy to factions or governments that fail to respect human rights, or providing palliatives that lessen the impetus for decisive international political action. In dealing with such dilemmas, humanitarian organizations have, until now, reacted in an *ad hoc* fashion and have often been unable to agree among themselves as to the wisest course of action. Recently, several practitioner organizations supported by the Foundation (for example, CARE, Save the Children, and the IRC) have begun to take explicit account of international humanitarian, human rights and refugee laws in their operational decision-making. In this venture, they have sought the advice and collaboration of legal and human rights organizations.

The Foundation has provided full or partial support for a number of activities in this area:

- York University in Toronto has designed and implemented a training module for refugee law judges in countries that have only recently begun to adjudicate cases of asylum seekers (for example, in Eastern Europe, the former Soviet Union, and many parts of Africa), and has assisted UNHCR in developing policies and procedures to safeguard the human rights of refugees under its protection.
- The Lawyers Committee for Human Rights has designed and implemented a training module for African humanitarian organizations on human rights and refugee law. It has also conducted field research and legal analysis on the practical application of the exclusion clauses in the 1951 Refugee Convention, which exclude from legal protection individuals who have committed serious international crimes such as genocide.
- In consultation with outside experts, CARE is examining its relief and development programs in the light of humanitarian and human rights legislation. It is developing guidelines to assist headquarters and field staff in future decision-making, and to train them in their use. It is assembling a comprehensive

human rights and legal training module, elements of which have already been incorporated into CARE's standard training on disaster response. CARE's materials are also being incorporated into a Sphere project humanitarian charter training module.

- The IRC has established a protection team, based at its New York headquarters, in order to integrate protection issues fully into its programs and to facilitate cooperation with other agencies in this endeavor. Like CARE, the IRC intends to raise awareness of protection and human rights issues among its staff, to provide training, and to pay greater attention to protection and human rights in devising its field programs and policies.
- The Humanitarianism & War Project has convened a number of meetings that bring together practitioners, staff of human rights organizations, and legal scholars to discuss the role of international humanitarian, refugee, and human rights legislation in humanitarian assistance, and has produced an excellent guide.⁷
- The Social Science Research Council is undertaking five case studies that will examine current problems in humanitarian assistance in which human rights issues play an important part. Each case study will be conducted by a research team comprised of a practitioner and an academic social scientist. The project, which will focus on sub-Saharan Africa, is expected to result in five reports and a book.

Career Development and Training

In 1998, awards were made to six humanitarian organizations (CARE, the IRC, Catholic Relief Services, Save the Children, International Medical Corps, and American Refugee Committee) to encourage use of the new academic programs and other forms of staff training. These organizations intend to experiment with a vari-

⁷William G. O'Neill, *A Humanitarian Practitioner's Guide to International Human Rights Law*, Watson Institute for International Studies, Occasional Paper #34, 1999.

ety of approaches: development and implementation, usually in collaboration with outside experts, of internal training courses or manuals for use in the field; short-term external training courses covering specific technical or managerial skills; small grants or loans to exceptionally promising staff who wish to obtain a relevant postgraduate qualification and who commit to return to the organization for a specified period; mini-sabbaticals (usually in an academic setting) for field staff to write up “lessons learned,” analyze data collected in the field and publish the results, or familiarize themselves with key findings in a new program area; and opportunities for field staff to visit model programs implemented in other countries or by other organizations.

InterAction, a US coalition of 160 agencies engaged in international development and humanitarian assistance, also received support to design and maintain an electronic database containing information on relevant courses and course materials, including those adapted for distance learning, evaluations of these courses by participants, and rosters of practitioners who have completed particular degree or non-degree training courses.

In November 2000, the Humanitarianism & War Project will organize a meeting on behalf of the Foundation to bring together staff of both humanitarian organizations and university programs to discuss the results of the grants to date. The meeting will also explore more broadly ways in which practitioner and academic programs may best work together, and how the Foundation may support these endeavors.

Revolving Emergency Funds

Several key humanitarian organizations drew the Foundation’s attention to the great need for funds to permit an immediate response in the first few days of emergencies. Emergencies now occur with unprecedented rapidity and scale, as illustrated by the exodus from Rwanda in 1994 and by the subsequent mass repatriation to Rwanda. Thousands of lives may be lost before relief organizations can raise the necessary funds to respond. Although donor agencies accept briefer, more flexible proposals for emergencies than for regular activities, they usually still require a formal written request. And donations from individuals tend to flow in once an emergency has received widespread coverage in the media. Humanitarian organizations therefore must rely on their own unre-

stricted funds to finance the first few weeks of activities. Yet unrestricted funds may constitute a very small proportion of their operating budgets (as low as five to ten percent).

In March 1997 and December 1999, the Trustees approved one-to-one matching awards totaling over \$3 million to five humanitarian organizations (CARE, the IRC, Save the Children, the American Refugee Committee, the International Medical Corps) to establish revolving emergency funds. The Foundation's intent is to establish a permanent corpus at each organization that could be drawn down in an emergency, then topped up by subsequent appeals, annual contributions, or project funding that could cover some expenses retroactively. The 1997 awards were made in honor of John C. Whitehead, on his retirement as Chairman of the Foundation's Board of Trustees.

The grantee organizations themselves have been surprised both by the number of times they have drawn on these funds over the past three years and by the relative ease with which they have been able to raise money both to meet the Foundation's match and to replenish expenditures from the corpus. It is hoped that the funds will contribute to the speed and quality of emergency assistance in several ways: by increasing the scope for emergency preparedness, including stockpiling of medicines and commodities; by enabling a very rapid response to crises, given that mortality rates are often exceptionally high during the first few days of mass flight; and by ensuring that organizations—such as these—with a strong commitment to the quality of their work are well-positioned to obtain large-scale funding when the crisis gains public attention.

Public Education and Policy Analysis

Although the Foundation's program has not emphasized the production and dissemination of policy research, support has been provided to five key organizations: the US Committee for Refugees (USCR), Refugees International, the Women's Commission for Refugee Women and Children, the Lawyers Committee for Human Rights, and the Council on Foreign Relations. These organizations provide information on refugees to policymakers, the press, and the general public, and conduct policy analysis on refugee crises and humanitarian assistance. USCR is the main source of refugee statistics; both USCR and Refugees International identify emerging refugee crises and provide early field reports aimed at mobilizing

humanitarian organizations and donors to give appropriate assistance; the Women's Commission investigates and draws attention to the special needs of refugee women and children; the Lawyers Committee provides analysis and training on the practical application to displaced populations of the various international laws and agreements that deal with human rights, refugees, and humanitarian assistance; and the Council on Foreign Relations is instrumental in drawing attention to, and encouraging analysis of, refugee crises among policymakers and other influential groups.

*Future Directions in both the Population
and Refugee Programs*

The annual report provides an ideal opportunity to signal the Foundation's future directions in both programs. A number of major changes are planned.

First, the Foundation intends, in the near future, to disengage from the fields of reproductive biology and contraceptive development. Since 1977, the program has consistently provided support to junior investigators in reproductive biology at university centers and to key contraceptive development programs, such as the Population Council's International Committee for Contraception Research, and the CONRAD Program's Consortium for Industrial Collaboration in Contraceptive Research. Given the great expansion of these fields since 1977, and the many other opportunities for grantmaking with which the Foundation is now confronted, we have concluded that support for biomedical fields is best undertaken by foundations that have this as their major focus, or are willing to appoint dedicated staff with a biomedical background. This Foundation's comparative advantage lies elsewhere—in fields that draw on our traditional expertise and interest in the humanities and social sciences.⁸

⁸We should like to acknowledge the great contribution of two individuals, in particular, to the Foundation's recent activities in reproductive biology and contraceptive development. Professor Mahmoud Fathalla, a consultant to the Rockefeller Foundation, devised a joint strategy for both the Rockefeller and Mellon foundations, to stimulate greater investment in contraceptive development on the part of industry, and to encourage collaboration between the for-profit and nonprofit sectors. Dr. Michael Harper of CONRAD has acted as a consultant to the Foundation in its reproductive biology and contraceptive development programs since 1991.

The Foundation's demography program has recently undergone a major shift in emphasis. The previous program focused substantively on the determinants of fertility in developing countries. The new program (the first awards were made to nine centers in March this year) will focus on urbanization and internal migration in developing countries, and life in urban settings with poor infrastructure. It will provide support for activities similar to those in the past program: dissertation fieldwork, postdoctoral fellowships, seed money for faculty research, and collaboration with centers in developing countries.

In the refugee program, we expect to continue the current directions—namely, building university-based applied research and training centers, and bringing together academics and practitioners to conduct research in significant areas of humanitarian policy and practice. We do not expect to add large numbers of new institutions to the program, nor do we expect to tackle new substantive fields. Rather, our approach will be to deepen, extend, and improve research and training in the areas already selected. The one exception to this general intention is the area of refugee education and training in which we hope to develop a program in the near future.

Over time, it seems likely that the distinction between the population and refugee programs will become increasingly blurred. The Foundation is seeking to engage demographers in the study of forced migration: the estimation of stocks and flows of forced migrants and of their characteristics, and research on the causes and consequences of forced migration and on its historical as well as current manifestations. And in many developing regions, especially sub-Saharan Africa, mass migrations—whether forced or not—are likely to have a profound effect on the prospects for economic and social development.

We plan to continue, or develop, initiatives that will be common to both fields: programs to encourage greater minority participation in demography and humanitarian assistance; support to encourage greater use of information technology in research and teaching, especially for the benefit of institutions in developing countries; awards to US universities and practitioner organizations to strengthen counterpart organizations overseas; and support for research and training networks that would bring together grantee organizations around substantive themes (for example, urbanization in sub-Saharan Africa, or psychosocial programs for displaced

populations) or shared training goals (for example, analysis of census data in Africa, or training of practitioners on the international legal framework governing refugees and humanitarian assistance).

Concluding Remarks

Refugee flows—and the civil and ethnic conflicts that cause them—are likely to remain among the most severe and intractable problems faced by the international community. The ultimate challenge is to identify those aspects of the causes of refugee flows that may lend themselves to feasible and effective policy interventions. A more modest—but important—goal is to learn how best to assist those forcibly displaced, both in the immediate aftermath of the crisis, and in laying the groundwork for an enduring solution. We hope the Foundation’s forced migration program will continue to contribute to this endeavor.

The Andrew W. Mellon Foundation

Summary of Grants and Contributions, 1999

	<i>Payable and Committed at</i>	<i>1999 Grants and Commitments</i>		<i>Payable and Committed at</i>
	<i>Dec. 31, 1998*</i>	<i>Appropriated</i>	<i>Paid</i>	<i>Dec. 31, 1999</i>
Conservation and the Environment	\$ 175,000	\$ 17,078,000	\$ 17,253,000	\$ —
Museums and Art Conservation	9,352,250	5,700,200	7,235,950	7,816,500
Performing Arts	1,784,334	14,993,450	14,234,903	2,542,881
Higher Education and Scholarship	28,219,837	98,992,887	101,571,117	25,641,607
Population	2,165,285	13,316,000	14,334,940	1,146,345
Public Affairs	3,646,472	5,738,000	6,571,223	2,813,249
Program Grants & Commitments—Totals . . .	\$ 45,343,178	\$155,818,537	\$161,201,133	\$ 39,960,582
Contributions	—	300,000	300,000	—
Totals	\$ 45,343,178	\$156,118,537	\$161,501,133	\$ 39,960,582

*Restated. Reflects cancellation in 1999 of 6 appropriations totalling \$1,829,299.

The Andrew W. Mellon Foundation

Classification of Grants

CONSERVATION AND THE ENVIRONMENT

Appropriated

Cornell University,
Ithaca, New York:

To support programs of ecological research and
training \$ 543,000

To support programs of ecological research and
training 462,000

Duke University,
Durham, North Carolina:

To support a program of research and training on
coastal processes 328,000

To support a program of ecological research and
training 246,000

Field Museum of Natural History,
Chicago, Illinois:

To support a program of ecological research and
training 350,000

Florida International University,
Miami, Florida:

To support a program of research and training on
coastal processes 640,000

To support research and graduate student researchers 438,000

Harvard University,
Cambridge, Massachusetts:

To support programs of ecological research and
training 624,000

To support programs of ecological research and
training 256,000

CONSERVATION AND
THE ENVIRONMENT

(continued)

Appropriated

Institute of Ecosystem Studies, Inc.,
Millbrook, New York:

To support a program of ecological research and training	333,000
To support programs of ecological research and training	225,000
To support a program of ecological research and training	60,000

Marine Biological Laboratory,
Woods Hole, Massachusetts:

To support programs of ecological research and training	900,000
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Missouri Botanical Garden,
St. Louis, Missouri:

To support development of a program to provide access to the information resources of the institution	600,000
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New York Botanical Garden,
Bronx, New York:

To support programs of ecological research and training	245,000
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Organization for Tropical Studies, Inc.,
Durham, North Carolina:

To support programs of ecological research and training	250,000
To support programs of ecological research and training	225,000
To support a program of ecological research and training	184,000
To support planning for a graduate student exchange program	20,000

CONSERVATION AND
THE ENVIRONMENT

(continued)

Appropriated

Smithsonian Institution,
Washington, DC:

To support a program of ecological research and
training 950,000

To support programs of ecological research and
training 225,000

South African National Parks,
Skukuza, South Africa:

To support programs of ecological research and
training 482,000

Stanford University,
Stanford, California:

To support a program of ecological research and
training 252,000

Trust for Public Land,
San Francisco, California:

To provide general support 1,750,000

Tufts University,
Medford, Massachusetts:

To support a program of ecological research and
training 440,000

Tulane University,
New Orleans, Louisiana:

To support a program of ecological research and
training 345,000

University of California at Berkeley,
Berkeley, California:

To support programs of ecological research and
training 480,000

To support a program of ecological research and
training 446,000

CONSERVATION AND
THE ENVIRONMENT

(continued)

Appropriated

University of California at Irvine,
Irvine, California:

To support programs of ecological research and
training 250,000

University of California at San Diego,
La Jolla, California:

To support a program of research and training on
coastal process 436,000

University of California at Santa Barbara,
Santa Barbara, California:

To support programs of ecological research and
training 298,000

To support programs of ecological research and
training 298,000

To support a program of ecological research and
training 200,000

University of Chicago,
Chicago, Illinois:

To support programs of ecological research and
training 250,000

University of Colorado at Boulder,
Boulder, Colorado:

To support a program of ecological research and
training 225,000

University of Connecticut,
Storrs, Connecticut:

To support programs of ecological research and
training 270,000

CONSERVATION AND
THE ENVIRONMENT

(continued)

Appropriated

University of Hawaii,
Honolulu, Hawaii:

To support a program of ecological research and training	600,000
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University of Miami,
Coral Gables, Florida:

To support a program of ecological research and training	29,000
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University of the Witwatersrand,
Johannesburg, South Africa:

To support a program of ecological research and training	900,000
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University of Washington,
Seattle, Washington:

To support a program of ecological research and training	470,000
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To support programs of ecological research and training	65,000
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University of Wyoming,
Laramie, Wyoming:

To support a program of ecological research and training	100,000
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Wesleyan University,
Middletown, Connecticut:

To support a program of ecological research and training	230,000
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CONSERVATION AND
THE ENVIRONMENT

(continued)

Appropriated

Yale University,

New Haven, Connecticut:

To support programs of ecological research and training	118,000
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To support a program of ecological research and training	40,000
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Total—Conservation and the Environment	<u>\$17,078,000</u>
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MUSEUMS AND
ART CONSERVATION

Appropriated

Art Institute of Chicago,
Chicago, Illinois:

To support the museum's plans to improve access to
unique archival collections \$ 26,500

Brooklyn Institute of Arts and Sciences,
Brooklyn, New York:

To support the museum's plans to improve access to
unique archival collections 33,000

Cleveland Museum of Art,
Cleveland, Ohio:

To endow two senior curatorial positions 1,500,000

Emory University,
Atlanta, Georgia:

To strengthen the educational role of the collections
and programs of the Michael C. Carlos Museum 201,000

George Eastman House,
Rochester, New York:

To support training in the field of photograph
conservation 290,000

Museum of Fine Arts, Boston,
Boston, Massachusetts:

To support the museum's plans to improve access to
unique archival collections 29,200

Museum of Modern Art,
New York, New York:

To support the museum's plans to create and promote
access to a digital database of its Design Collection 47,000

To create and promote access to a digital database of
the museum's architecture and Design Collection 1,600,000

To support on an interim basis four key positions in the
library and museum archives 160,000

MUSEUMS AND
ART CONSERVATION

(continued)

Appropriated

Museum of Modern Art,
New York, New York:

(continued)

To support the museum's plans to improve access to
unique archival collections 18,800

Philadelphia Museum of Art,
Philadelphia, Pennsylvania:

To support the museum's plans to improve access to
unique archival collections 26,500

Rhode Island School of Design,
Providence, Rhode Island:

To strengthen the educational role of the collections
and programs of the Museum of Art 218,000

Rutgers, The State University of New Jersey,
New Brunswick, New Jersey:

To strengthen the educational role of the collections
and programs of the Jane Voorhees Zimmerli Museum
of Art 225,200

Wellesley College,
Wellesley, Massachusetts:

To strengthen the educational role of the collections
and programs of the Davis Museum and Cultural
Center 225,000

Worcester Art Museum,
Worcester, Massachusetts:

To support a permanent endowment establishing two
Mellon Conservation Fellowships 1,100,000

Total—Museums and Art Conservation \$5,700,200

PERFORMING ARTS	<i>Appropriated</i>
Alabama Shakespeare Festival, Inc., Montgomery, Alabama:	
To support the Southern Writers Project	\$ 50,000
American Music Center, Inc., New York, New York:	
To support <i>NewMusicBox</i>	250,000
American Repertory Theatre Company, Incorporated, Cambridge, Massachusetts:	
To support artistic staff and resident artists	400,000
To support the Institute for Advanced Theatre Training	100,000
American Symphony Orchestra League, New York, New York:	
To support the Orchestra Leadership Academy	1,000,000
Appalshop, Incorporated, Whitesburg, Kentucky:	
To support artistic development residencies, and documentation	250,000
Association of British Orchestras Trust, London, England:	
To support the development of a database on the activities of British orchestras	25,000
Atlantic Theater Company, New York, New York:	
To support artistic and administrative development	75,000
Berkeley Repertory Theatre, Berkeley, California:	
To support play development, literary staff, and production expenses	300,000

PERFORMING ARTS

(continued)

*Appropriated*California Institute of the Arts,
Valencia, California:

To support its festival on American minimalism 20,000

Center Stage Associates, Inc.,
Baltimore, Maryland:

For use as a permanent endowment 1,000,000

Chamber Music America, Inc.,
New York, New York:

For use as a matching endowment 1,000,000

Cornerstone Theater Company, Inc.,
Los Angeles, California:To support ensemble productions, and artistic and
administrative salaries 300,000CSC Repertory LTD,
New York, New York:To support productions of classics, the development of
new plays, and education programs 75,000Grantmakers in the Arts,
Seattle, Washington:To support research, publications, and information
services 15,000Hartford Stage Company, Inc.,
Hartford, Connecticut:

To support artist fees and productions of classic plays 300,000

Houston Symphony Society,
Houston, Texas:

To support its strategic planning process 40,000

PERFORMING ARTS

(continued)

*Appropriated*Joe Goode Performance Group,
San Francisco, California:

To support artistic development 25,000

Kansas City Symphony,
Kansas City, Missouri:

To strengthen artistic and administrative performance . 800,000

Manhattan Class Company, Inc.,
New York, New York:To support the expansion of the theater's literary
department 50,000Manhattan Theatre Club, Inc.,
New York, New York:

To support artist fees and new productions 200,000

Meet the Composer Inc.,
New York, New York:To support *Music Alive!* 300,000Metropolitan Opera Association, Inc.,
New York, New York:To support the orchestra development program, and
new and 20th-century operas 1,000,000Musical Arts Association (Cleveland Orchestra),
Cleveland, Ohio:

To strengthen artistic and administrative performance . 200,000

Music-Theatre Group, Inc.,
New York, New York:

To support artistic development 40,000

New Jersey Symphony Orchestra,
Newark, New Jersey:

To strengthen artistic and administrative performance . 700,000

PERFORMING ARTS

(continued)

*Appropriated*New York City Opera, Inc.,
New York, New York:

To support the Fund for Artistic Excellence	250,000
To support Showcasing American Composers	50,000

New York Shakespeare Festival,
New York, New York:

To support activities in the LuEsther Lab	400,000
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New York Theatre Workshop, Inc.,
New York, New York:

To support artistic fees and new productions	75,000
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Opera America, Inc.,
Washington, DC:

To support planning for its endowment campaign	100,000
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Perseverance Theatre, Incorporated,
Douglas, Alaska:

To support the Alaska Conservatory	200,000
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Philadelphia Orchestra Association,
Philadelphia, Pennsylvania:

To support the Electronic Media Forum	25,000
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Pick-Up Performance Company, Inc.,
New York, New York:

To support artistic development	50,000
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Pittsburgh Symphony Society,
Pittsburgh, Pennsylvania:

To support organizational planning	50,000
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Playwrights Horizons, Inc.,
New York, New York:

To support artistic development and production costs .	125,000
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PERFORMING ARTS

(continued)

Appropriated

Pregones Touring Puerto Rican Theatre

Collection Inc.,

Bronx, New York:

To support artistic development	30,000
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Primary Stages Company Inc.,

New York, New York:

To support artistic fees and new productions	50,000
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Richmond Symphony,

Richmond, Virginia:

To strengthen artistic and administrative performance .	200,000
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Roundabout Theatre Company, Inc.,

New York, New York:

To support productions of new and classic plays	400,000
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Seattle Repertory Theatre,

Seattle, Washington:

To support dramaturgy, artistic staff, and productions of new and classic plays	300,000
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Seattle Symphony Orchestra, Inc.,

Seattle, Washington:

To strengthen artistic and administrative performance .	200,000
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Second Stage Theatre, Inc.,

New York, New York:

To support the Joseph Papp Artist in Residence Program	50,000
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Signature Theatre Company, Inc.,

New York, New York:

To support artistic productions and ticket subsidy programs	75,000
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PERFORMING ARTS

(continued)

*Appropriated*South Coast Repertory, Inc.,
Costa Mesa, California:

To support the Pacific Playwrights Festival 300,000

St. Louis Symphony Society,
Saint Louis, Missouri:

To strengthen artistic and administrative performance . 900,000

Theatre and Arts Foundation of San Diego County,
La Jolla, California:

To support the theater's artistic leadership transition . . 125,000

Theatre Communications Group, Inc.,
New York, New York:To support TCG's long-range planning; enhancements
to current programs; and the development, testing, and
implementation of new training programs 500,000Toledo Orchestra Association, Inc.,
Toledo, Ohio:

To strengthen artistic and administrative performance . 600,000

UBW, Inc.,
New York, New York:

To support its apprentice program 50,000

Vineyard Theatre and Workshop Center Inc.,
New York, New York:

To support artistic fees and new productions 50,000

Virginia Polytechnic Institute and State University,
Blacksburg, Virginia:

To support the Orchestra Forum 593,450

Vivian Beaumont Theater, Inc.,
New York, New York:

To support productions of new plays 400,000

PERFORMING ARTS

(continued)

Appropriated

Washington Drama Society, Inc.,
Washington, DC:

To support new play development 300,000

Workshop of the Players Art Foundation,
New York, NY:

To support artistic and administrative development . . . 30,000

Total—Performing Arts

\$14,993,450

HIGHER EDUCATION
AND SCHOLARSHIP

Appropriated

Allegheny College,
Meadville, Pennsylvania:

To support a new curriculum and a program for junior
faculty \$ 200,000

American Academy of Arts and Sciences,
Cambridge, Massachusetts:

To support a study of the impact of racial and ethnic
diversity in US institutions of higher education 472,000

To support task force meetings for the development of
a database on the humanities 37,000

To support a special issue of *Daedalus* devoted to South
Africa 25,000

American Antiquarian Society,
Worcester, Massachusetts:

To support specific initiatives to strengthen the care of,
and improve access to, research collections 500,000

American Council of Learned Societies,
New York, New York:

To support an electronic publishing initiative for
scholarly monographs in history 3,000,000

To support fellowships for postdoctoral research at the
international and foreign language collections of the
Library of Congress 400,000

American Council on Education,
Washington, DC:

To support research on the relationship between
diversity in higher education and diversity in the
workplace 225,000

HIGHER EDUCATION
AND SCHOLARSHIP

(continued)

Appropriated

American Museum of Natural History,
New York, New York:

To support a project to create an integrated digital
library of research resources and scientific collections . . . 2,000,000

American Philosophical Society,
Philadelphia, Pennsylvania:

To support specific initiatives to strengthen the care of,
and improve access to, research collections 452,000

American Society of International Law,
Washington, DC:

To support an online publishing workshop 48,000

American University in Cairo,
New York, New York:

For use as an endowment to support fellowships for
the intensive study of Arabic in the Center for Arabic
Studies Abroad 1,000,000

To support planning for the effective use of information
technologies on its new campus 40,000

American University of Beirut,
New York, New York:

To support efforts to reinvigorate undergraduate
teaching, particularly in the humanities and social
sciences 600,000

American University of Paris, Inc.,
Paris, France:

To support the attendance of faculty members at
professional meetings, workshops, and conferences in
Europe and the US 50,000

HIGHER EDUCATION
AND SCHOLARSHIP

(continued)

Appropriated

Appalachian College Association,
Berea, Kentucky:

To support the planning of a study of the impact of
Appalachian College Association college graduates on
their region 50,000

To support a professional development program for
women administrators at Appalachian College
Association colleges 50,000

Associated Colleges of the Midwest,
Chicago, Illinois:

To support efforts to strengthen existing study-abroad
programs through increased collaboration 500,000

Associated Colleges of the South, Inc.,
Atlanta, Georgia:

To support efforts to strengthen the role of the library
on liberal arts college campuses 600,000

To support efforts to strengthen existing study-abroad
programs through increased collaboration 500,000

Association of American University Presses, Inc.,
New York, New York:

To support an enhanced program of annual data
collection and analysis on the state of university press
publishing 500,000

Bard College,
Annandale-on-Hudson, New York:

To support the opening of Smolny College, and the
establishment of an international summer/winter term
in human rights in Southern Africa 275,000

HIGHER EDUCATION
AND SCHOLARSHIP

(continued)

Appropriated

Barnard College,
New York, New York:

To support five postdoctoral fellowships	500,000
To support existing environmental studies programs . .	295,000
To support planning programs to address the career enhancement of liberal arts faculty members, from their initial appointments to post-retirement	94,000

Bates College,
Lewiston, Maine:

To support the design of a “Learning Associates” program	35,000
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Boston University,
Boston, Massachusetts:

To support research on several aspects of the debate over race and diversity in higher education	582,000
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Bowdoin College,
Brunswick, Maine:

To support a senior president’s discretionary fund to strengthen programs at the college	250,000
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Brown University,
Providence, Rhode Island:

To support the translations of 19th-century Latin American literary works	211,000
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Bryn Mawr College,
Bryn Mawr, Pennsylvania:

To strengthen the role of the library on liberal arts college campuses	450,000
To support a study exploring college selectivity and students’ socioeconomic outcomes	44,000

HIGHER EDUCATION
AND SCHOLARSHIP

(continued)

Appropriated

California Institute of Technology,
Pasadena, California:

To support a Mellon Seminar in Interpretation 90,000

Canadian Centre for Architecture,
Montreal, Canada:

To support a senior fellowship in the Visiting Scholars
Program at the Canadian Centre for Architecture's
Study Center 245,000

Carleton College,
Northfield, Minnesota:

To strengthen the role of the library on liberal arts
college campuses 200,000

To support planning programs to address the career
enhancement of liberal arts faculty members, from
their initial appointments to post-retirement 80,000

Carnegie Mellon University,
Pittsburgh, Pennsylvania:

To support efforts to improve the teaching of foreign
languages 442,000

CERGE-EI Foundation,
Ann Arbor, Michigan:

To support the Center for Economic Research and
Graduate Education-Economics Institute 400,000

Claremont University Center,
Claremont, California:

To implement a common system for integrating the
records of student services 775,000

Colby College,
Waterville, Maine:

To support existing environmental studies programs . . . 295,000

HIGHER EDUCATION
AND SCHOLARSHIP

(continued)

Appropriated

College Board,
New York, New York:

To support a study group to plan a research program
examining correlates of academic achievement among
students of color 50,000

Colorado College,
Colorado Springs, Colorado:

To support existing environmental studies programs . . . 300,000

To support an examination of the curriculum offered at
the college 45,000

Columbia University,
New York, New York:

For use as an endowment to improve the effectiveness
of graduate education in the humanities and related
social sciences while reducing time-to-degree and
attrition rates 2,500,000

To improve the quality and effectiveness of graduate
education within selected departments of the humani-
ties and related social sciences departments, while
reducing time-to-degree and attrition rates 450,000

To support research on a biography of Andrew W.
Mellon 130,000

To support an online publishing measurement and
evaluation workshop 44,640

Connecticut College,
New London, Connecticut:

To support a senior president's discretionary fund to
strengthen programs at the college 300,000

To support existing environmental studies programs . . . 298,000

HIGHER EDUCATION
AND SCHOLARSHIP

(continued)

Appropriated

Consortium of Estonian Libraries Network,
Tallinn, Estonia:

To support the attendance of five representatives of the
Estonian Libraries Network at the Innovative Interfaces
conference in Oakland, California 9,600

Cornell University,
Ithaca, New York:

To improve the quality and effectiveness of graduate
education within selected departments of the humani-
ties and related social sciences departments, while
reducing time-to-degree and attrition rates 450,000

To support data collection for the Foundation's
Graduate Education Institutional Grants Program 45,000

To support the planning phase of Project Euclid, an
electronic scholarly communication initiative in
mathematics 27,000

Council for Christian Colleges & Universities,
Washington, DC:

To support professional development programs for
women and minority members of the Council 40,000

Council of American Overseas Research Centers,
Washington, DC:

To support a program of short-term research
residencies for Czech, Hungarian, Polish, and Slovak
humanities scholars at institutes for advanced study
located in Western Europe 2,000,000

Council on Library and Information Resources,
Washington, DC:

To provide general program support 2,600,000

To strengthen the role of the library on liberal arts
college campuses 250,000

HIGHER EDUCATION
AND SCHOLARSHIP

(continued)

Appropriated

Council on Library and Information Resources,
Washington, DC:

(continued)

To support the development and evaluation of a prototype for an "Academic Image Exchange," a digital image resource for students, teachers, and scholars of the history of art and related disciplines 100,000

To support students and training in digitization and preservation 12,000

To support the participation of the Biblioteca Nacional de Venezuela's director of technical services in a course and workshop on preservation microfilming and digital imaging 8,847

Council on Undergraduate Research,
Washington, DC:

To support enhanced participation of faculty and administrators from private historically black colleges in Council conferences 150,000

Dartmouth College,
Hanover, New Hampshire:

To support a project to measure the costs and pedagogic effectiveness of using technology in calculus instruction 224,000

Davidson College,
Davidson, North Carolina:

To support a review of four key areas of the college's operation 50,000

Denison University,
Granville, Ohio:

To support an existing environmental studies programs 298,000

HIGHER EDUCATION
AND SCHOLARSHIP

(continued)

Appropriated

DePauw University,
Greencastle, Indiana:

To support a senior president's discretionary fund to
strengthen programs at the college 250,000

Dillard University,
New Orleans, Louisiana:

To inventory, catalog, and begin preservation of
unprocessed archival materials in the university's
library 300,000

Drexel University,
Philadelphia, Pennsylvania:

To support a project to measure the costs and
pedagogic effectiveness of using technology to deliver
an entire degree program in information sciences 307,000

Duke University,
Durham, North Carolina:

To support pilot studies of the academic performance
of undergraduate students 150,000

Dunhuang Research Academy,
Dunhuang, Gansu Province, Peoples Republic of
China:

To support two scholarly conferences and related
exhibitions and publications 60,000

Eastern Cape Higher Education Association Trust,
Port Elizabeth, South Africa:

To support the South East Academic Libraries System
in investigations into regional library collaboration in
the Eastern Cape of South Africa 44,500

HIGHER EDUCATION
AND SCHOLARSHIP

(continued)

Appropriated

Eastern Seaboard Association of Tertiary Institutions,
Durban, South Africa:

To support the creation of a shared library system
among six higher education institutions in South
Africa's KwaZulu-Natal province 816,000

Eleutherian Mills-Hagley Foundation,
Wilmington, Delaware:

To support specific initiatives to strengthen the care of,
and improve access to, research collections 490,000

Five Colleges of Ohio,
Gambier, Ohio:

To strengthen the role of the library on liberal arts
college campuses 475,000

Five Colleges, Inc.,
Amherst, Massachusetts:

To strengthen the role of the library on liberal arts
college campuses 1,100,000

To support a planning session for reviewing the
teaching of foreign languages 7,500

Folger Shakespeare Library,
Washington, DC:

To support specific initiatives to strengthen the care of,
and improve access to, research collections 500,000

Foundation of Tertiary Institutions in the
Northern Metropolis,
Johannesburg, South Africa:

To support the automation of library systems in phase
three of the Gauteng and Environs Library Consortium 678,000

HIGHER EDUCATION
AND SCHOLARSHIP

(continued)

Appropriated

Franklin and Marshall College,
Lancaster, Pennsylvania:

To support a senior president's discretionary fund for
strengthening programs at the college 250,000

Gallaudet University,
Washington, DC:

To design, implement, and evaluate electronic
curricular materials for two core orientation courses:
the First Year Seminar for undergraduate studies and
the Culture Language Colloquium for graduate
students 400,000

Georgia Institute of Technology,
Atlanta, Georgia:

To support projects measuring the pedagogic
effectiveness and costs of using technology to improve
undergraduate instruction 240,000

Godollo University of Agricultural Sciences,
Godollo, Hungary:

To support a conference entitled "Vision 2000 II" in
the Fall of 1999 34,000

Graduate School and University Center, City
University of New York,
New York, New York:

To support a study of the effects of the City University
of New York's "open admissions" policy on low-income
students and their children 560,000

Great Lakes Colleges Association, Inc.,
Ann Arbor, Michigan:

To support efforts to strengthen existing study-abroad
programs through increased collaboration 500,000

HIGHER EDUCATION
AND SCHOLARSHIP

(continued)

Appropriated

Grinnell College,
Grinnell, Iowa:

To support five postdoctoral fellowships 500,000

Hamilton College,
Clinton, New York:

To support the development of strategies for the
assessment of student learning in a liberal arts setting 50,000

Hampshire College,
Amherst, Massachusetts:

To support a planning symposium on the future of the
liberal arts college library 25,000

Hampton University,
Hampton, Virginia:

To improve the effectiveness of the development office 350,000

Harvard University,
Cambridge, Massachusetts:

To design and test an alternative assessment tool that
could help admissions officers identify larger numbers
of promising candidates from diverse backgrounds 1,900,000

To support a study of the contributions to American
culture, science, and society of young immigrants from
Central Europe in the 1930s and 1940s 650,000

To improve the quality and effectiveness of graduate
education within selected departments of the humani-
ties and related social sciences departments, while
reducing time-to-degree and attrition rates 450,000

To support a study of the effectiveness of intensive
counseling of high school students in narrowing
the gap in college attendance between high- and
low-income youths 270,000

HIGHER EDUCATION
AND SCHOLARSHIP

(continued)

Appropriated

Harvard University,
Cambridge, Massachusetts:
(continued)

To support planning for the new Radcliffe Institute for Advanced Study	111,500
To support research on law students' attitudes concerning racial diversity	110,000
For use by the Graduate School of Education to continue data collection for the Law School Diversity Study	50,000

Haverford College,
Haverford, Pennsylvania:

To support planning programs to address the career enhancement of liberal arts faculty members, from their initial appointment to post-retirement	93,000
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Henry E. Huntington Library & Art Gallery,
San Marino, California:

To support specific initiatives to strengthen the care of and improve access to research collections	530,000
To support a Mellon Seminar in Interpretation	40,000
To support a Mellon Seminar in Interpretation	10,000

Heritage College,
Toppenish, Washington:

To support the development of an Honors Program and an Institute for Sahaptin Language and Culture	50,000
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Hobart and William Smith Colleges,
Geneva, New York:

To support a new collaborative study-abroad program in cooperation with Union College	400,000
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HIGHER EDUCATION
AND SCHOLARSHIP

(continued)

Appropriated

Howard University,
Washington, DC:

To support a research project to document African-
American influence and involvement in the South
African struggle against racial discrimination 240,000

Johns Hopkins University,
Baltimore, Maryland:

To support a study of evolving university-industry
relationships 525,000

To support fellowships for the intensive study of Arabic
at the Center for Arabic Study Abroad 258,000

JSTOR,
New York City, New York:

To increase JSTOR's coverage of the arts and sciences
to include additional content in the humanities 1,750,000

Kenyon College,
Gambier, Ohio:

To support strategic planning activities 32,000

Lehigh University,
Bethlehem, Pennsylvania:

To support Web-based curriculum development 670,000

To support the planning of a project to design and
offer Web-based instruction in the freshman-year
engineering curriculum to high school juniors and
seniors 120,000

LeMoyne-Owen College,
Memphis, Tennessee:

To support the initial phase of an effort to strengthen
the recruitment of faculty and improve faculty salary
scales 144,500

HIGHER EDUCATION
AND SCHOLARSHIP

(continued)

Appropriated

Lewis and Clark College,
Portland, Oregon:

To support existing environmental studies programs . . . 300,000

Library Company of Philadelphia,
Philadelphia, Pennsylvania:

To support specific initiatives to strengthen the care of,
and improve access to, research collections 300,000

Library Information Network Consortium,
Riga, Latvia:

To support the installation of a system that will permit
the development of a unified client database 33,000

To support hardware improvements at the Latvian
National Library 25,000

To support attendance at the American Library
Association conference in New Orleans, Louisiana 2,000

Macalester College,
St. Paul, Minnesota:

To permit the completion of a study of the history
and academic performance of historically Black private
colleges in the US since 1836 75,000

Massachusetts Institute of Technology,
Cambridge, Massachusetts:

To strengthen response rates for the Consortium on
Financing Higher Education Alumni Survey 2000 50,000

Medici Archive Project Inc.,
New York, New York:

To support the preparation of an electronic finding aid
to the archives of the Medici Grand Dukes of Tuscany . . 458,000

To support the preparation of an electronic finding aid
to the archives of the Medici Grand Dukes of Tuscany . . 50,000

HIGHER EDUCATION
AND SCHOLARSHIP

(continued)

Appropriated

Michigan State University,
East Lansing, Michigan:

To support projects at Michigan State University and at Texas A&M University which measure the costs and pedagogic effectiveness of using network technology in natural sciences and psychology instruction 352,000

For use by the Consortium for Inter-Institutional Collaboration in African and Latin American Studies to conduct a workshop for museums and archival institutions to develop a plan for managing the cultural heritage of South Africa 50,000

Minnesota Private College Research Foundation,
St. Paul, Minnesota:

To strengthen access to electronic library resources at small- and medium-sized colleges in Minnesota and the Dakotas 335,000

Modern Language Association of America,
New York, New York:

To support the creation of a JSTOR collection of modern language and literature journals 2,000,000

To support: expanding the scope of the Modern Language Association of America International Bibliography to include publications about the teaching of language, writing, and literature at the college level; improving coverage of scholarship about Arabic, Hebrew, Persian, and Turkish languages and literatures; and planning, in consultation with the JSTOR staff and scholars in the field, for the selection of modern language and literature journals that should be included in the next phase of JSTOR 1,500,000

To support efforts to improve the teaching of foreign languages in American universities 365,000

HIGHER EDUCATION
AND SCHOLARSHIP

(continued)

Appropriated

Mount Holyoke College,
South Hadley, Massachusetts:

To support existing environmental studies programs . . .	300,000
To support pilot studies of the academic performance of undergraduate students	100,000
To support the preparation of a comprehensive study of technology transfer in the context of library automation in the Czech Republic and Slovakia	80,000
To support the annual Czech and Slovak Library Information Network conference in southern Bohemia, and essential office supplies at the four libraries of the Košice Library Information Network	27,000

Mystic Seaport Museum, Inc.,
Mystic, Connecticut:

To support its Nineteenth-Century American Merchant Marine Digital Library Project	385,000
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National Academy of Sciences,
Washington, DC:

For use by the Board on Science, Technology and Economic Policy of the National Research Council for an analysis of current forms of protecting intellectual property rights and their implications for research, communication, and commercial use	250,000
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National Humanities Center,
Research Triangle Park, North Carolina:

For use as a matching endowment for fellowships	3,000,000
To support the extension by one year of the Sawyer Seminar on liberal cultures and their critics	40,000

HIGHER EDUCATION
AND SCHOLARSHIP

(continued)

Appropriated

National Opinion Research Center,
Chicago, Illinois:

To support a new General Social Survey module that examines perceptions of, attitudes toward, and experiences with growing racial and ethnic diversity in America	180,000
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New York Academy of Medicine,
New York, New York:

To improve access to its library collections	435,000
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New York Public Library,
New York, New York:

For use as an endowment of three fellowships for resident scholars in the New York Public Library's Center for Scholars and Writers, and for spendable funds to support near-term fellowships and related expenses	3,000,000
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Newberry Library,
Chicago, Illinois:

To support specific initiatives to strengthen the care of, and improve access to, research collections	500,000
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Nicholas Copernicus University,
Torun, Poland:

To support students and a meeting of the advisory board of the International Centre for Information Management, Systems and Services	24,000
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Northeast Document Conservation Center,
Andover, Massachusetts:

To support scanning workshops	45,000
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HIGHER EDUCATION
AND SCHOLARSHIP

(continued)

Appropriated

Northwestern University,
Evanston, Illinois:

To support the photography, digital image processing,
and cataloging of the cave art in Dunhuang, China 3,000,000

To provide supplemental support for the photography
of cave art in Dunhuang, China 185,000

To develop plans for a digital archive of cave art
in Dunhuang, China, and associated manuscripts,
paintings, and sculptures now held by libraries and
museums in many countries 125,000

Oberlin College,
Oberlin, Ohio:

To support five postdoctoral fellowships 500,000

To support the environmental studies program 300,000

Occidental College,
Los Angeles, California:

To support three one-week technology training
workshops 40,000

Phillips Academy-Andover,
Andover, Massachusetts:

To support efforts to expand recruitment of out-
standing minority students and prepare them to enter
graduate programs, and to teach at the university level . 600,000

Pierpont Morgan Library,
New York, New York:

To support specific initiatives to strengthen the care of,
and improve access to, research collections 500,000

HIGHER EDUCATION
AND SCHOLARSHIP

(continued)

Appropriated

Pomona College,
Claremont, California:

To support planning by the seven Claremont institutions of their first cooperative business and student information system 150,000

Princeton University,
Princeton, New Jersey:

To support data collection and research on the changing size and composition of minority student enrollments during the past 25 years at selective institutions of higher education 846,000

To improve the quality and effectiveness of graduate education within selected departments of the humanities and related social sciences departments, while reducing time-to-degree and attrition rates 450,000

To support a study of the pre-college and collegiate experiences of Hispanic students in selective colleges and their subsequent accomplishments 300,000

To support two research projects, "Libraries in the Digital Age" and "Technology Transfer in Transitional Societies" 264,000

Reed College,
Portland, Oregon:

To strengthen the role of the library on liberal arts college campuses 200,000

To support planning for the development and expansion of Web use among liberal arts colleges 25,500

HIGHER EDUCATION
AND SCHOLARSHIP

(continued)

Appropriated

Rice University,
Houston, Texas:

For use as a matching endowment for three post-
doctoral fellowships in the humanities and associated
social sciences that will be located in the Center for the
Study of Cultures 1,475,000

Royal Anthropological Institute of Great Britain
and Ireland,
London, England:

To complete the conversion of the Anthropological
Index to electronic form 20,000

Royal Society,
London, England:

To support legal expenses related to participation
in JSTOR 50,000

Rutgers, The State University of New Jersey,
New Brunswick, New Jersey:

To support projects measuring the pedagogic
effectiveness and costs of using technology to improve
undergraduate instruction 500,000

Sarah Lawrence College,
Bronxville, New York:

To support the introduction of information technology
into the curriculum 300,000

Scripps College,
Claremont, California:

To support a two-year study to evaluate the college's
study-abroad program 50,000

HIGHER EDUCATION
AND SCHOLARSHIP

(continued)

Appropriated

Social Science Research Council,
New York, New York:

To support a program of international predoctoral research fellowships and associated training workshops in the humanities and social sciences, for use in collaboration with the American Council of Learned Societies	3,000,000
To administer the Mellon Minority Undergraduate Fellowship's Predoctoral Research Grant program	1,000,000
To administer the Mellon Minority Undergraduate Fellowship's Annual Graduate Summer Conferences . .	1,000,000

South African Bibliographic and
Information Network,
Centurion, South Africa:

To create a new national union catalogue and interlibrary lending network for South Africa	650,000
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Spelman College,
Atlanta, Georgia:

To complete a strategic plan designed to provide the institution with a working document to guide decisions over the next decade	95,000
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St. John's College (Annapolis),
Annapolis, Maryland:

To support a faculty development project focused on the St. John's mathematics curriculum, in collaboration with St. John's College, Santa Fe, and St. Thomas Aquinas College (Santa Paula, California)	350,000
To support three college committees appointed to review issues of governance	45,000

HIGHER EDUCATION
AND SCHOLARSHIP

(continued)

Appropriated

Stanford University,
Stanford, California:

To improve the quality and effectiveness of graduate education within selected departments of the humanities and related social sciences while reducing time-to-degree and attrition rates 500,000

To support research on educational policy in developing countries, for use by its Center for Research on Economic Development and Policy Reform 164,000

To support the Stanford University Conference on Race 25,000

State University of New York at Stony Brook,
Stony Brook, New York:

To support a graduate fellowship in Latin American history 50,000

Stillman College,
Tuscaloosa, Alabama:

To improve the Development Office's alumni database and its effectiveness in fundraising from alumni sources 100,000

Swarthmore College,
Swarthmore, Pennsylvania:

To support five postdoctoral fellowships 500,000

Thomas Jefferson Memorial Foundation, Inc.,
Charlottesville, Virginia:

To support the planning and development of an archaeological information system and a digital archive of archaeological data 600,600

HIGHER EDUCATION
AND SCHOLARSHIP

(continued)

Appropriated

TLT Group, Inc.,
Washington, DC:

To support the completion, enhancement, and demonstration of a guidebook to assist colleges and universities on the costs of using instructional technologies 48,000

Tufts University,
Medford, Massachusetts:

To support publications and research for Frontier Issues in Economic Thought 50,000

Tulane University,
New Orleans, Louisiana:

To improve library operations 45,000

Union College,
Schenectady, New York:

To support a research project on individual and institutional strategies for planning faculty retirement . . . 19,100

University of California at Berkeley,
Berkeley, California:

To improve the quality and effectiveness of graduate education within selected departments of the humanities and related social sciences departments, while reducing time-to-degree and attrition rates 450,000

To support research on the changing composition of students who take the Scholastic Aptitude Test (SAT) and the determinants of high SAT scores 400,000

To permit completion of a study of the career histories of doctoral recipients during the decade following receipt of their degrees 100,000

HIGHER EDUCATION
AND SCHOLARSHIP

(continued)

Appropriated

University of California at Davis,
Davis, California:

To support projects measuring the pedagogic effectiveness and costs of using technology to improve undergraduate instruction 500,000

University of California at Los Angeles,
Los Angeles, California:

To support research on factors affecting minority high school students' decisions to attend college and on the effects of recent rulings barring the use of race in college admissions decisions 1,000,000

To support an evaluation of library automation in four East European countries 25,500

University of California at Riverside,
Riverside, California:

For use as an endowment to support editorial costs of the "English Short Title Catalogue" 400,000

University of Cape Town Fund, Inc.,
New York, New York:

To support management training and improving administrative structures at the University of Cape Town 600,000

To support research on higher education in South Africa 300,000

To support planning for institutional restructuring at the University of Cape Town 50,000

University of Chicago,
Chicago, Illinois:

To establish 24 three-year graduate fellowships in the humanities and social sciences 720,000

To improve the quality and effectiveness of graduate education within selected departments of the humanities and related social sciences departments, while reducing time-to-degree and attrition rates 450,000

HIGHER EDUCATION
AND SCHOLARSHIP

(continued)

Appropriated

University of Denver,
Denver, Colorado:

To develop leadership skills of women in administrative positions at the University of Cape Town and other South African universities	510,000
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University of Florida,
Gainesville, Florida:

To continue support of a project to digitize and promote scholarly use of Caribbean newspapers	12,100
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University of Houston,
Houston, Texas:

To support a study of the legal and economic consequences of federal higher education policy	210,000
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University of Illinois at Urbana-Champaign,
Champaign, Illinois:

To support research on life satisfaction using the College and Beyond database	165,000
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University of Massachusetts at Amherst,
Amherst, Massachusetts:

To support a Mellon Seminar in Interpretation	90,000
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University of Michigan,
Ann Arbor, Michigan:

To improve the quality and effectiveness of graduate education within selected departments of the humanities and related social sciences departments, while reducing time-to-degree and attrition rates	450,000
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To support research on the backgrounds and aspirations of high-potential, college-bound black students . .	395,000
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HIGHER EDUCATION
AND SCHOLARSHIP

(continued)

Appropriated

University of North Carolina at Chapel Hill,
Chapel Hill, North Carolina:

To support the Minority Undergraduate Research
Assistant Program 500,000

To edit the "Atlas of the Greek and Roman World" 125,000

University of North Carolina at Greensboro,
Greensboro, North Carolina:

To support a Mellon Seminar in Interpretation 80,000

University of Notre Dame,
Notre Dame, Indiana:

For use as a matching endowment in support of a
one-year postdoctoral fellowship in medieval studies 400,000

To support research on the effects of secondary
education on the achievements of students at selective
colleges 379,000

University of Pennsylvania,
Philadelphia, Pennsylvania:

To support a longitudinal study of the academic
performance of minority and white students at selective
colleges and universities 2,500,000

To improve the quality and effectiveness of graduate
education within selected departments of the humani-
ties and related social sciences departments, while
reducing time-to-degree and attrition rates 450,000

To support the creation of a digital library of about
1,500 newly published books in the field of history 218,000

University of Southern California,
Los Angeles, California:

To improve the teaching of foreign languages 450,000

HIGHER EDUCATION
AND SCHOLARSHIP

(continued)

Appropriated

University of Texas at Austin,
Austin, Texas:

To support a program of research fellowships at the
Harry H. Ransom Humanities Research Center 375,000

University of Texas at Dallas,
Richardson, Texas:

To support research on factors affecting minority high
school students' decisions to attend college and on the
effects of recent rulings barring the use of race in
college admissions decisions 1,250,000

University of Virginia,
Charlottesville, Virginia:

To support the Institute for Advanced Technology in
the Humanities 1,000,000

To support its library in phase II of the University of
Virginia's American Fiction digitization project 500,000

University of Washington,
Seattle, Washington:

To support research on factors affecting minority high
school students' decisions to attend college and on the
effects of recent rulings barring the use of race in
college admissions decisions 310,000

Vassar College,
Poughkeepsie, New York:

To strengthen the role of the library on liberal arts
college campuses 200,000

Virginia Foundation for Independent Colleges,
Richmond, Virginia:

To support the development of an information
technology skills certification examination for liberal
arts students 50,000

HIGHER EDUCATION
AND SCHOLARSHIP

(continued)

Appropriated

Virginia Historical Society,
Richmond, Virginia:

To support specific initiatives to strengthen the care of,
and improve access to, research collections 500,000

Voorhees College,
Denmark, South Carolina:

To support the introduction of effective and sustainable
uses of technology in teaching in the humanities 365,000

Washington and Lee University,
Lexington, Virginia:

To support the development of a program in global and
international studies 35,000

Washington University,
Saint Louis, Missouri:

To establish seven two-year post-graduate fellowships
to foster interdisciplinary scholarship in the humanities
and social sciences 810,000

Wellesley College,
Wellesley, Massachusetts:

To support five postdoctoral fellowships 500,000

Western Cape Tertiary Institutions Trust,
Cape Town, South Africa:

To provide technical support for the Cape Library
Cooperative (CALICO) 25,000

To support the South African bandwidth initiative 5,000

Whittier College,
Whittier, California:

To support institutional initiatives that will strengthen
the college's future 100,000

HIGHER EDUCATION
AND SCHOLARSHIP

(continued)

Appropriated

Woodrow Wilson National Fellowship Foundation,
Princeton, New Jersey:

To support The Andrew W. Mellon Fellowships in
Humanistic Studies 2,450,000

To support a public policy education program in South
Africa 1,262,000

To fund travel and research grants, dissertation com-
pletion grants, and junior faculty sabbatical grants for
Mellon Minority Undergraduate Fellowship program
participants 1,075,000

Yale University,
New Haven, Connecticut:

To improve the quality and effectiveness of graduate
education within selected departments of the humani-
ties and related social sciences departments while
reducing time-to-degree and attrition rates 450,000

To support a study of JSTOR applications 33,000

Total—Higher Education and Scholarship

\$98,992,887

POPULATION

Appropriated

Alan Guttmacher Institute,
New York, New York:

To support population policy research and analysis . . . \$ 1,200,000

American University of Beirut,
New York, New York:

To support demographic research and training 75,000

Baylor College of Medicine,
Houston, Texas:

To support research relevant to contraceptive
development 150,000

Boston Women's Health Book Collective Inc.,
Somerville, Massachusetts:

To support population policy activities with special
reference to women's reproductive health 60,000

Brown University,
Providence, Rhode Island:

To support advanced training of demographers from
developing countries 270,000

To support visiting fellowships in anthropological
demography 140,000

Columbia University,
New York, New York:

To support population policy activities with special
reference to women's reproductive health 300,000

Harbor-UCLA Research and Education Institute,
Torrance, California:

To support research relevant to contraceptive
development 150,000

POPULATION

(continued)

*Appropriated*Harvard University,
Cambridge, Massachusetts:

To support visiting fellowships in anthropological demography	140,000
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International Center for Research on Women,
Washington, DC:

To support population policy activities with special reference to women's reproductive health	150,000
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International Union for the Scientific Study
of Population,
Liège, Belgium:

To support international collaboration in population research	150,000
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International Women's Health Coalition,
New York, New York:

To support population policy activities with special reference to women's reproductive health	360,000
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Medical College of Hampton Roads,
Norfolk, Virginia:

For use by the CONRAD program for a small grants program to encourage research collaboration between reproductive biology centers in the United States and in similar centers in developing countries	1,500,000
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For use by the CONRAD program for the activities of its Consortium for Industrial Collaboration in Contraceptive Research	1,500,000
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For use by the CONRAD program for administration of an annual competition among Mellon-supported reproductive biology centers in the United States	36,000
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POPULATION

(continued)

*Appropriated*National Academy of Sciences,
Washington, DC:

For use by the Committee on Population to support population policy research and analysis	300,000
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Oregon Health Sciences University,
Portland, Oregon:

To support junior investigators in reproductive biology and to provide seed money for research relevant to contraceptive development	360,000
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To support research relevant to contraceptive development	150,000
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PATH,
Seattle, Washington:

To support a program of small grants to increase local capacity to manufacture, procure, and distribute commodities related to family planning and reproductive health services	500,000
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Population Action International,
Washington, DC:

To support population policy research and analysis . . .	450,000
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Population Association of America Inc.,
Silver Spring, Maryland:

To support international collaboration in population research	150,000
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Population Council,
New York, New York:

To support advanced training of demographers from developing countries	1,050,000
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To support research relevant to contraceptive development	150,000
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POPULATION

(continued)

*Appropriated*Population Reference Bureau, Inc.,
Washington, DC:

To support population policy research and analysis . . . 425,000

Université de Montréal,
Montréal, Canada:To support advanced training of demographers from
developing countries 450,000University of California at Davis,
Davis, California:To support research relevant to contraceptive
development 150,000University of Cape Town Fund, Inc.,
New York, New York:

To support demographic research and training 60,000

University of Kansas Medical Center Research
Institute, Inc.,
Kansas City, Kansas:To support research relevant to contraceptive
development 150,000University of Maryland,
College Park, Maryland:To support a visiting fellowship in anthropological
demography 60,000University of Michigan,
Ann Arbor, Michigan:For use by its Population Studies Center to support
the development of computer-assisted instructional
materials for the analysis of survey data in developing
countries 300,000

POPULATION

(continued)

Appropriated

University of North Carolina at Chapel Hill,
Chapel Hill, North Carolina:

To support junior investigators in reproductive biology and to provide seed money for research relevant to contraceptive development	360,000
To support research relevant to contraceptive development	150,000
To support a visiting fellowship in anthropological demography	70,000

University of Pennsylvania,
Philadelphia, Pennsylvania:

To support junior investigators in reproductive biology and to provide seed money for research relevant to contraceptive development	360,000
To support research relevant to contraceptive development	150,000
To support visiting fellowships in anthropological demography	120,000

University of Virginia,
Charlottesville, Virginia:

To support junior investigators in reproductive biology and to provide seed money for research relevant to contraceptive development	360,000
To support research relevant to contraceptive development and programs to encourage graduate study among under-represented minorities	250,000

POPULATION

(continued)

*Appropriated*University of Washington,
Seattle, Washington:

To support junior investigators in reproductive biology and to provide seed money for research relevant to contraceptive development	360,000
To support research relevant to contraceptive development and programs to encourage graduate study among under-represented minorities	250,000
Total—Population	\$13,316,000

PUBLIC AFFAIRS

Appropriated

**Bold Initiative, Inc.,
New York, New York:**

To support research on the relationship among work-
force diversity, organizational processes, and business
performance\$ 40,000

**Classroom, Inc.,
New York, New York:**

To support continued participation in the Mellon-
funded research program at Indiana University's
Center for Reading and Language Studies 72,000

**Cooperative for Assistance and Relief Everywhere,
Inc. (CARE),
Atlanta, Georgia:**

Matching grant to increase the size of its revolving
emergency fund 500,000

**Harvard University,
Cambridge, Massachusetts:**

To support further studies of the effects of institutional
characteristics of colleges on black educational success 46,000

**Immigration and Refugee Services of America,
Washington, DC:**

For use by its US Committee for Refugees in support
of public education and policy analysis in the field of
forced migration 180,000

**International Medical Corps,
Los Angeles, California:**

Matching grant to increase the size of its revolving
emergency fund 100,000

PUBLIC AFFAIRS

(continued)

*Appropriated*International Rescue Committee, Inc.,
New York, New York:

Matching grant to increase the size of its revolving emergency fund	500,000
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For use by its Women's Commission for Refugee Women and Children in support of public education and policy analysis in the field of forced migration	180,000
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Lawyers Committee for Human Rights,
New York, New York:

To support public education and policy analysis in the field of forced migration	150,000
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Nonprofit Coordinating Committee of
New York, Inc.,
New York, New York:

To update and expand an earlier study of New York's nonprofit sector	250,000
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Refugees International,
Washington, DC:

To support public education and policy analysis in the field of forced migration	180,000
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Save the Children Federation, Inc.,
Westport, Connecticut:

Matching grant to increase the size of its revolving emergency fund	500,000
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Tufts University,
Medford, Massachusetts:

To support research and training in the field of forced migration	750,000
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PUBLIC AFFAIRS

(continued)

*Appropriated*University of Oxford,
Oxford, England:

Matching grant to establish an endowed University Lectureship in Forced Migration	600,000
To support the integration of the Refugee Studies Centre's documentation center into the university's main library system	200,000
For use by its Refugee Studies Centre to support a training program to address mental health problems among refugees	60,000

University of Pennsylvania,
Philadelphia, Pennsylvania:

To support a training program to address mental health problems among refugees	320,000
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University of the Witwatersrand,
Johannesburg, South Africa:

To support a research and teaching program in the field of forced migration	350,000
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Urban Institute,
Washington, DC:

To support the development of a strategic plan for creating data reporting standards for the nonprofit sector	150,000
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Vera Institute of Justice, Inc.,
New York, New York:

To support three two-year, postdoctoral fellowships for the study of race, crime, and justice	610,000
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Total—Public Affairs

 \$5,738,000

CONTRIBUTIONS

Appropriated

Affinity Group on Population, Reproductive Health and Rights Inc., Takoma Park, Maryland:	
To provide general support	\$ 25,000
Association of Governing Boards of Universities and Colleges, Washington, DC:	
To provide general support	35,000
Committee to Encourage Corporate Philanthropy Inc., New York, New York:	
To provide general support	50,000
Council on the Environment, Inc., New York, New York:	
To provide general support	30,000
Eviction Intervention Services, New York, New York:	
To provide general support	40,000
Foundation Center, New York, New York:	
To provide general support	30,000
Marymount Manhattan College, New York, New York:	
To provide general support	30,000
National Center For Nonprofit Boards, Washington, DC:	
To provide general support	30,000

CONTRIBUTIONS

(continued)

Appropriated

Nonprofit Coordinating Committee of
New York, Inc.,
New York, New York:

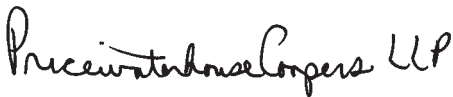
To provide general support	30,000
	<hr/>
Total—Contributions	\$300,000
	<hr/>
Grand Totals	<u>\$156,118,537</u>

Financial Statements

REPORT OF INDEPENDENT ACCOUNTANTS

To the Board of Trustees of
The Andrew W. Mellon Foundation

In our opinion, the accompanying balance sheet and the related statements of activities and cash flows present fairly, in all material respects, the financial position of The Andrew W. Mellon Foundation at December 31, 1999 and 1998, and the change in its net assets and its cash flows for the years then ended in conformity with accounting principles generally accepted in the United States. These financial statements are the responsibility of the Foundation's management; our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits on these statements in accordance with auditing standards generally accepted in the United States, which require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatements. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for the opinion expressed above.

A handwritten signature in cursive script that reads "PricewaterhouseCoopers LLP".

PricewaterhouseCoopers LLP
New York, New York
March 17, 2000

The Andrew W. Mellon Foundation

Balance Sheet

	<i>December 31,</i>	
	<u>1999</u>	<u>1998</u>
	<i>(In thousands)</i>	
ASSETS		
Investments:		
Marketable securities	\$3,184,810	\$2,833,347
Limited liquidity investments	1,296,247	495,637
Other	50,000	46,000
	<u>4,531,057</u>	<u>3,374,984</u>
Cash.....	16,534	19,356
Investment and other income receivable	11,659	14,502
Receivable from unsettled securities sales	42,318	9,668
Federal excise tax refund receivable.....	3,325	3,031
Property, at cost less accumulated depreciation of \$3,123 and \$2,780 at December 31, 1999 and 1998, respectively.....	<u>10,790</u>	<u>9,934</u>
Total assets.....	<u>\$4,615,683</u>	<u>\$3,431,475</u>
LIABILITIES AND PRINCIPAL BALANCE		
Grants payable.....	\$ 5,958	\$ 13,558
Payable from unsettled securities purchases	93,690	84,277
Accrued expenses.....	2,425	2,114
Deferred federal excise tax payable.....	<u>26,865</u>	<u>11,165</u>
Total liabilities.....	128,938	111,114
Net assets (unrestricted)	<u>4,486,745</u>	<u>3,320,361</u>
Total liabilities and net assets	<u>\$4,615,683</u>	<u>\$3,431,475</u>

The accompanying notes are an integral part of these financial statements.

The Andrew W. Mellon Foundation

Statement of Activities

	<i>For the years ended</i>	
	<i>December 31,</i>	
	<u>1999</u>	<u>1998</u>
	<i>(In thousands)</i>	
INVESTMENT RETURN:		
Gain on investments:		
Realized.....	\$ 498,540	\$ 301,181
Unrealized	773,332	52,108
Interest	41,500	39,994
Dividends	34,239	39,305
Other income	7,094	8,997
	<u>1,354,705</u>	<u>441,585</u>
Less: Investment expenses	(13,909)	(11,740)
Net investment return	<u>1,340,796</u>	<u>429,845</u>
EXPENSES:		
Program grants and contributions, net	153,789	142,232
Salaries, pensions and benefits	7,130	6,471
Other administrative and office expenses	3,787	4,079
Current provision for federal excise tax	9,706	7,006
	<u>174,412</u>	<u>159,788</u>
Cumulative effect of change in accounting method for limited liquidity investments, net of taxes	—	109,301
Change in net assets	1,166,384	379,358
Net assets (unrestricted) at beginning of year	<u>3,320,361</u>	<u>2,941,003</u>
Net assets (unrestricted) at end of year	<u>\$4,486,745</u>	<u>\$3,320,361</u>

The accompanying notes are an integral part of these financial statements.

The Andrew W. Mellon Foundation

Statement of Cash Flows

	<i>For the years ended December 31,</i>	
	<u>1999</u>	<u>1998</u>
	<i>(In thousands)</i>	
Cash flow from investment income and operations:		
Interest and dividends received.....	\$ 78,411	\$ 80,030
Other income received	7,265	8,707
Grant refunds received.....	112	646
Federal excise tax refund received.....	—	61
Grants and contributions paid	(161,501)	(142,216)
Investment expenses paid	(13,616)	(11,615)
Salaries and other administrative expenses paid	(10,556)	(10,159)
Federal excise tax paid	(10,000)	(11,456)
Net cash used by investment income and operations	<u>(109,885)</u>	<u>(86,002)</u>
Cash flow from investing activities:		
Proceeds from sales of marketable securities:		
Short-term.....	2,348,013	1,744,931
Other.....	3,488,985	2,239,426
Receipts from limited liquidity investments	79,423	79,179
Capital gain distributions received	595	20,031
Net returns received on financial instruments.....	—	2,531
Purchases of marketable securities:		
Short-term.....	(2,330,607)	(1,705,561)
Other.....	(3,301,046)	(2,174,420)
Purchases of limited liquidity investments	(169,596)	(107,522)
Additions to property.....	(1,199)	(71)
Net losses on financial instruments	(7,505)	—
Net cash provided by investing activities	<u>107,063</u>	<u>98,524</u>
Net (decrease) increase in cash	(2,822)	12,522
Cash at beginning of year.....	<u>19,356</u>	<u>6,834</u>
Cash at end of year.....	<u>\$ 16,534</u>	<u>\$ 19,356</u>
<i>Supplemental Disclosure of Noncash Investing Activities:</i>		
Distributions of securities received from limited liquidity investments	<u>\$ 163,306</u>	<u>\$ 69,137</u>

The accompanying notes are an integral part of these financial statements.

The Andrew W. Mellon Foundation

Reconciliation of Change in Net Assets to Net Cash Used by Investment Income and Operations

	<i>For the years ended December 31,</i>	
	<u>1999</u>	<u>1998</u>
	<i>(In thousands)</i>	
Increase in net assets	\$1,166,384	\$379,358
Adjustments to reconcile change in unrestricted net assets to net cash used by investment income and operations:		
Realized gain on investments	(498,540)	(301,181)
Increase in unrealized appreciation of investments	(789,032)	(55,402)
Decrease in income receivable	2,843	442
(Decrease) increase in grants payable	(7,600)	662
Increase in accrued expenses	311	149
Depreciation expense	343	368
Increase in deferred federal excise tax provision	15,700	3,294
Increase in federal excise tax receivable	(294)	(4,391)
Cumulative effect of accounting change.....	—	(109,301)
Total adjustments.....	<u>(1,276,269)</u>	<u>(465,360)</u>
Net cash used by investment income and operations	<u>(\$109,885)</u>	<u>(\$86,002)</u>

The accompanying notes are an integral part of these financial statements.

The Andrew W. Mellon Foundation

NOTES TO FINANCIAL STATEMENTS

NOTE 1—SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES:

The financial statements of The Andrew W. Mellon Foundation (the “Foundation”) have been prepared in conformity with generally accepted accounting principles. The significant accounting policies followed are described below.

Investments:

Investments in marketable securities are stated at market value. Market value is determined using daily closing last trade prices, where available, for all tradeable instruments on any global stock exchange. Realized gains and losses on investments in securities are calculated based on the first-in, first-out identification method.

Limited liquidity investments are stated at estimated fair value. Limited liquidity investments are primarily made under agreements to participate in limited partnerships and are generally subject to certain withdrawal restrictions. These investments are valued on the basis of the Foundation’s equity in the net assets of such partnerships. Values for these partnerships, which may include investments in both nonmarketable and market-traded securities, are provided by the general partner and may be based on historical cost, appraisals, market values discounted for concentration of ownership, or other estimates. Because of the inherent uncertainty of valuing the investments in such partnerships and certain of the underlying investments held by the partnerships, the Foundation’s estimate of fair value may differ significantly from the values that would have been used had a ready market for the investments existed. All limited partnerships are audited annually by independent auditing firms.

The other investment is the Foundation’s 100% interest in a trust which owns property from which the Foundation receives the net income. Other income is principally the income from this trust, derived primarily from royalties from coal mining, with minor amounts of income from timbering and oil and gas wells. The value of the Foundation’s investment is determined based on an estimate of the remaining mineral reserves and the timber on the properties and the discounted value of the anticipated future income. The properties are recorded at an estimated current value of \$50 million at December 31, 1999 and \$46 million at December 31, 1998.

Grants:

Grant appropriations include both conditional and unconditional grants. Unconditional grants are expensed when appropriated. Certain grants are approved by the Trustees subject to the grantee fulfilling specific conditions, most frequently that all or a portion of the grant funds be matched in a specified ratio. Such conditional grants are considered commitments and are not recorded as expense until the conditions of the grant are met. Substantially all grants payable are due within one year and are recorded at face value.

Federal Excise Tax:

The Foundation qualifies as a tax-exempt organization under Section 501(c)(3) of the Internal Revenue Code and, accordingly, is not subject to federal income taxes. However, the Foundation is subject to a federal excise tax. The Foundation follows the policy of providing for federal excise tax on the net appreciation (both realized and unrealized) of investments. The deferred federal excise tax in the accompanying financial statements represents tax provided on the net unrealized appreciation of investments.

Property:

Property primarily consists of land, buildings and their improvements located in New York City. These buildings are depreciated on a straight-line basis over their useful lives, generally twenty-five years.

Investment Return:

Investment return includes income and realized and unrealized gains on all investments. Unrealized gains comprise the increase in unrealized appreciation on marketable securities and the limited liquidity investments, net of deferred federal excise tax provided on such unrealized appreciation. Realized gain includes gains realized on the sale of marketable securities and the income or loss of partnership investments and realized gains, whether distributed or undistributed, from such investments.

Expenses:

Investment expenses are the costs of portfolio management, including fees for investment management, custody, and advisory services. Other administrative and office expenses include all costs of operating the Foundation offices, including maintenance and depreciation.

Use of Estimates:

The preparation of financial statements in accordance with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reported period. Actual results could differ from those estimates.

NOTE 2—CHANGE IN ACCOUNTING METHOD:

In 1998, the Foundation changed its method of accounting for investments in limited liquidity investments from the cost method to the fair value method. The cumulative effect of this change, reflected in the Statement of Activities for the year ended December 31, 1998, comprises:

	<i>Amount</i> <i>(in thousands)</i>
Fair value of limited liquidity investments	\$445,809
Less cost of limited liquidity investments	<u>(334,278)</u>
Unrealized appreciation and increase in carrying value . . .	111,531
Less deferred federal excise tax at 2%.	<u>(2,230)</u>
Cumulative effect of change in accounting method for limited liquidity investments	<u><u>\$109,301</u></u>

NOTE 3—INVESTMENTS:

Marketable securities held at December 31, 1999 and 1998 are summarized as follows:

	<i>December 31, 1999</i>		<i>December 31, 1998</i>	
	<i>Market Value</i>	<i>Cost</i>	<i>Market Value</i>	<i>Cost</i>
	<i>(in thousands)</i>		<i>(in thousands)</i>	
Equities.....	\$2,378,248	\$1,794,572	\$1,933,355	\$1,480,793
Fixed Income	677,609	690,650	752,187	735,917
Short-term	129,061	129,047	146,445	146,417
Other	(108)	291	1,360	1,528
Total	<u>\$3,184,810</u>	<u>\$2,614,560</u>	<u>\$2,833,347</u>	<u>\$2,364,655</u>

Pursuant to its limited partnership agreements, the Foundation is committed to contribute approximately \$260 million as of December 31, 1999 in additional capital over the next ten years. Unpaid commitments at December 31, 1998 were \$288 million.

As a result of its investing strategies, the Foundation is a party to a variety of financial instruments. These financial instruments may include equity, fixed income, and foreign currency futures and options contracts, foreign currency forwards, and interest rate cap and floor contracts. Much of the Foundation's off-balance-sheet exposure represents strategies that are designed to reduce the interest rate and market risk inherent in portions of the Foundation's investment program. Changes in the market values of these financial instruments are recognized currently in the Statement of Activities.

Through certain investment managers, the Foundation purchases and sells forward currency contracts whereby the Foundation agrees to exchange one currency for another on an agreed-upon date at an agreed-upon exchange rate to minimize the exposure of certain of its marketable securities to adverse fluctuations in financial and currency markets. As of December 31, 1999 and 1998, the Foundation had forward currency contracts with notional amounts totaling \$117 million and \$86 million, respectively. At December 31, 1999, approximately \$115 million in assets and \$117 million in liabilities related to open foreign currency contracts, at market value, are included in other marketable securities.

Through a securities lending program managed by its investment custodian, the Foundation loans certain stocks and bonds included in its investment portfolio to qualified investors. These investors are required to deposit cash of a like amount with the investment custodian as collateral on such loans. The Foundation's investment custodian has indemnified the program against counterparty risk. The Foundation's gross securities loaned to certain investors at December 31, 1999 amounted to approximately \$130 million.

Financial instruments such as those described above involve, to varying degrees, elements of market risk and credit risk in excess of the amounts recorded on the balance sheet. Market risk represents the potential loss the Foundation faces due to the decrease in the value of financial instruments. Credit risk represents the maximum potential loss the Foundation faces due to possible non-performance by obligors and counterparties of the terms of their contracts.

Management does not anticipate that losses, if any, resulting from its market or credit risks would materially affect the financial position and operations of the Foundation.

NOTE 4—FEDERAL EXCISE TAX:

The Internal Revenue Code imposes an excise tax on private foundations equal to 2 percent of net investment income (principally interest, dividends, and net realized capital gains, less expenses incurred in the production of investment income).

The provision for federal excise tax consists of a current provision on realized net investment income and a deferred provision on unrealized appreciation of investments. The current provision for 1999 on net investment income at 2 percent is \$9.7 million. The current provision in 1998 at 2 percent was \$7.0 million. The change in unrealized appreciation reflected on the Statement of Activities includes a provision for deferred taxes based on net unrealized appreciation of investments at 2 percent. The increase in unrealized appreciation in 1999 and 1998 resulted in an increase of the deferred federal excise tax liability of \$15.7 million and \$1.1 million, respectively. In 1998, the change in the method of accounting for limited liquidity investments resulted in an increase in the deferred federal excise tax liability of \$2.2 million as described in Note 2.

NOTE 5—GRANTS, CONTRIBUTIONS, and COMMITMENTS:

The following table of grant activity by major program area includes all grant appropriations approved during 1999. The grants payable and committed at December 31, 1998 have been restated to reflect cancellations of \$1,829 thousand.

	<i>Payable and Committed, Dec. 31, 1998</i>	<i>1999 Grants and Commitments</i>		<i>Payable and Committed, Dec. 31, 1999</i>
		<i>Appropriated</i>	<i>Paid</i>	
		<i>(In thousands)</i>		
Conservation and the Environment.....	\$ 175	\$ 17,078	\$ 17,253	\$ —
Museums and Art Conservation	9,353	5,700	7,236	7,817
Performing Arts	1,784	14,994	14,235	2,543
Higher Education and Scholarship	28,220	98,993	101,571	25,642
Population.....	2,165	13,316	14,335	1,146
Public Affairs.....	3,646	5,738	6,571	2,813
Program Grants & Commitments—Totals	45,343	155,819	161,201	39,961
Contributions.....	—	300	300	—
Totals	<u>\$45,343</u>	<u>\$156,119</u>	<u>\$161,501</u>	<u>\$39,961</u>

Grant and grant commitment activity is summarized below.

	<i>Amount</i>	
	<u>1999</u>	<u>1998</u>
	<i>(In thousands)</i>	
Grants Payable:		
Grants payable at January 1	\$13,558	\$12,896
Less grant cancellations	(262)	—
Grant expense	154,163	142,878
Less grants paid.....	<u>(161,501)</u>	<u>(142,216)</u>
Grants payable at December 31	<u>\$5,958</u>	<u>\$13,558</u>
Net Grant Expense:		
Unconditional grants	\$137,677	\$122,730
Conditional grants	<u>16,486</u>	<u>20,148</u>
	154,163	142,878
Less grant cancellations	(262)	—
Less grant refunds	<u>(112)</u>	<u>(646)</u>
	<u>\$153,789</u>	<u>\$142,232</u>
Grant Commitments:		
Grant commitments at January 1	33,614	32,213
Less commitment cancelled	(1,567)	(412)
Conditional grants appropriated.....	18,442	21,961
Less grants meeting conditions for payment	<u>(16,486)</u>	<u>(20,148)</u>
Grant commitments at December 31	<u>\$34,003</u>	<u>\$33,614</u>

