1979

Washington University Magazine, Fall 1979

Follow this and additional works at: https://digitalcommons.wustl.edu/ad_wumag

Recommended Citation
https://digitalcommons.wustl.edu/ad_wumag/75

This Article is brought to you for free and open access by the Washington University Publications at Digital Commons@Becker. It has been accepted for inclusion in Washington University Magazine by an authorized administrator of Digital Commons@Becker. For more information, please contact engeszer@wustl.edu.
# Annual Report of the University

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highlights</td>
<td>2</td>
<td>The year in brief</td>
</tr>
<tr>
<td>Reports of the Deans</td>
<td>4</td>
<td>Assessments and projections</td>
</tr>
<tr>
<td>Financial Condition of the University</td>
<td>24</td>
<td>The bottom line</td>
</tr>
<tr>
<td>Comments by the Chancellor</td>
<td>30</td>
<td>View from the top</td>
</tr>
<tr>
<td>China Markers</td>
<td>34</td>
<td>Highlights of a faculty sojourn</td>
</tr>
<tr>
<td>Orienteering</td>
<td>48</td>
<td>With Herb Weitman’s camera</td>
</tr>
</tbody>
</table>

**Photo Credits:** Photos page 6, 7, 8, 11 top, 14 bottom, 15 bottom, 18, and 23 bottom by Peter Zimmerman. All others by Herb Weitman.

Washington University (ISSN 0162-7570) is published quarterly by Washington University at Lindell and Skinker, St. Louis, Mo. 63130. Second-class postage paid at St. Louis, Mo., and at additional mailing offices. Printed by The Ovid Bell Press, Inc., Fulton, Mo. Direct all communication to: The Editor, Washington University Magazine, St. Louis, Mo. 63130. © 1979 Washington University.
WASHINGTON UNIVERSITY marked its 125th birthday in 1978, with an Anniversary Celebration of special programs and events scheduled throughout the academic year. The programs were planned to appeal to a wide range of laymen and scholars.

In October, the 125th Anniversary Biomedical Symposium brought to campus seven internationally renowned scientists, including four Nobel Laureates, to provide an overview of important recent research in the life sciences. Coming from England were Andrew F. Huxley and Sir Peter B. Medawar, recipients of the Nobel Prize in 1963 and 1968, respectively; Walter F. Bodmer, professor of genetics at the University of Oxford; and James W. Black of the Wellcome Research Laboratories in Kent, England. The other participants were Har Gobind Khorana of M.I.T. and George E. Palade of Yale, both Nobel Laureates, and Andrew A. Benson of Scripps Institution of Oceanography. Also in October, Sir Peter Medawar was joined by his wife, Lady Jean Medawar, in leading the Mr. and Mrs. Spencer T. Olin Conference on Women. "The Quest for Equality" assembly lectures, sponsored by the School of Law, were scheduled throughout the year. The series of nine speakers opened with Paul A. Freund, Carl M. Loeb University Professor of Law Emeritus at Harvard and Trustee Emeritus at Washington University, and closed with the Honorable Archibald Cox, Professor of Law at Harvard and former U.S. Solicitor General. Space won't allow recording all of the Anniversary activities, which included special exhibits, lectures and speakers. Highlighting the festivities were a campus birthday party in Bowles Plaza, featuring a 125-square-foot birthday cake, and the Founders Day banquet with alumnus William H. Webster, director of the Federal Bureau of Investigation, as principal speaker.

The University's 118th Commencement climaxax an exciting, stimulating academic year. Speaker was William H. Gass, David May Distinguished University Professor in the Humanities. And, for the first time in almost a decade, a senior student, Thomas Countryman, addressed the assembled audience. He also received one of the 2457 degrees granted in 1978-79. Of the total, 1234 were for undergraduate work and 1223 for graduate studies.

Undergraduate enrollment remained high in 1978. Quantity was matched by quality. Of the 1116 entering freshmen one in seven was a National Merit Scholar and over 60 percent ranked in the top 10 percent of their high school class. The 1979 entering class is composed of a full component of bright, industrious students. This news is particularly encouraging, because the time is at hand when the nation's college-age population is on the decline.

Last year this report discussed Washington University's Tuition Stabilization Plan. It was designed to help students attend Washington University—students who otherwise might be lured to an institution having a more modest tuition. The Tuition Stabilization Plan offers a unique means of reducing college tuition costs by permitting prepayment of the full four years of tuition based on the tuition rate in effect at the time of enrollment. Parents' response indicates that the plan does indeed meet the needs of some parents and students. A significant proportion of the parents of entering freshmen elected to use the plan. In addition, 58 returning students took advantage of it.

Many parents also utilized the second feature of the plan, which allows them to borrow funds from the University to prepay the four-year tuition.

The quality of education offered at Washington University rests primarily with the quality of faculty and of students they attract. During the year honors continued to come. These achievements are noted by the deans in their individual reports. Alumni also distinguished themselves in many ways. Last fall, a 1954 graduate of the School of Medicine, Dr. Daniel Nathans, shared the Nobel Prize for medicine with two other scientists, one of whom, Dr. Hamilton O. Smith, served as an intern in the Washington University Medical Center.

Faculty continue to receive substantial funding for educational and research projects from external sources. In fiscal 1979, a total of $58.3 million was awarded to the University for 622 projects. Of this amount, $52.5 million represents federal commitments. The most recent governmental statistics available (for fiscal 1977) show that in amounts awarded to institutions, Washington University ranks 18th in...
the nation, being one of the smallest institutions in the top 20.

Other important gifts come to Washington University from the private sector—from alumni and other individuals, foundations, and corporations. This support, like government funding, is attracted to the University by the highquality of its education and research and, in turn, is an integral factor in the maintenance of such quality.

Several issues were of special concern to the campus community during the past year. Among them were the appropriate investments for the University and the voting of proxies. Debates included students, faculty, administration, and trustees. Also of interest were the continuing efforts to serve minority group members more effectively.

The University received a major federal educational grant for the 1979-80 academic year, which provides 11 graduate fellowships for minority and women students along with accompanying supportive services including special workshops. The grant, funded by the U.S. Office of Education under its Graduate and Professional Opportunities Program, totals $130,325, the largest award made to any of the 107 participating institutions.

The University also was chosen as one of eight regional centers for administration of the program.

Washington University takes particular pride in its beautiful campus and handsome buildings. Since many of the buildings are 50 to 75 years old, renovation and modernization are ongoing needs. The most popular of these was the revamping of portions of Mallinckrodt Center. The Commons Room has become a lively coffee house and Beaumont Lounge has been transformed into an attractive, comfortable deli and ice cream shop. A new steam and condensate tunnel Forsyth to the South Forty replaces a buried pipe system, which was very difficult to repair. The new tunnel is expected to save the University some $50,000 annually. Other alterations include installation of ramps to eliminate architectural barriers that impede the handicapped, an emergency lighting system for each residence hall, and improved recreational and athletic facilities.

The year also included the re-dedication in May of the Women’s Building as The Ann Whitney Olin Women’s Building. The naming of the building and the unveiling of a portrait of Mrs. (Spencer T.) Olin pay tribute to her many contributions to this University and her life-long concern for women’s education.

Last spring the Commission on the Future of Washington University was formed. The effort will involve distinguished leaders from both the public and private sectors in Missouri, the Midwest, and the nation. Twelve Trustees of Washington University have been named to chair Commission Task Forces. Over the next three years, each Task Force will meet with faculty, administrators, and students to familiarize Commission members with the programs and plans of the major units of the University and to seek their comment and counsel. At its conclusion, the Commission will report to the University’s Board of Trustees. Chairman of the Commission is W. L. Hadley Griffin, chairman of the board and chief executive officer of Brown Group, Inc., St. Louis, and a vice chairman of the University’s Board of Trustees. Executive Director is Stanley M. Richman, an attorney and retired vice president and secretary of General American Life Insurance Company, St. Louis.

Three important decanal appointments were made in fiscal 1979. Ralph E. Morrow accepted the position of Dean of the Faculty of Arts and Sciences. Formerly Dean of the Graduate School of Arts and Sciences, he has relinquished that responsibility to Acting Dean David L. Kirk. A historian, Dean Morrow has been Chairman of the Department of History and has received a number of scholastic awards.

The search for the Dean of the College of Arts and Sciences has ended successfully with the appointment of Linda Bradley Salamon who comes to Washington University from the University of Pennsylvania. A scholar of Renaissance English literature, she has an unusual grasp and understanding of the problems that face institutions of higher learning today.

Another deanship, that of the School of Business and Public Administration, has been filled by Robert L. Virgil, Jr. His professional and administrative skills eminently qualify him. In addition, he is an outstanding teacher who has been honored numerously as “Teacher of the Year.”

Two resignations have also marked the year. Dean of the School of Law Edward T. Foote has announced his intention to leave the University at the close of the present academic year to return to the practice of law. During his tenure he has steadily moved the School forward. The law faculty has brought to the University a sense of intellectual excitement as great issues of the day have been debated. The student body has been strengthened; the alumni have been enthusiastic and generous. The difficult search for a successor is under way.

Vice Chancellor for University Services David S. Luecke accepted a position as professor of administrative sciences in the College of Business Administration of Valparaiso University. His new post will enable him to move closer to a career balance of teaching, writing, and administration.

On Vice Chancellor Luecke’s departure, it became advisable to make some administrative changes. Merle King, Provost, has assumed the additional title of Executive Vice Chancellor. Reporting to him will be a Vice Chancellor and Associate Provost yet to be named. John Biggs, formerly Vice Chancellor for Financial Affairs, is now Vice Chancellor for Administration and Finance. It is felt that, with these changes, the University is well organized for the opportunities and challenges of the coming years.
Nearly two years of study, argument, negotiation, and legislation came to a successful conclusion in April when agreement was reached upon the details of a revised curriculum for the College of Arts and Sciences. The revision embodies the thinking of many members of the faculty and the undergraduate student body but it does not gainsay the contributions of many to the favorable outcome to make special mention of the work of a few, viz.: Dean Emeritus of the College, Burton Wheeler; Acting Dean of the College, James Davis; Associate Professors Edward Macias and Alfred Stenner of the Departments of Chemistry and Philosophy, respectively, who chaired the Curriculum Committee during the period of revision; their colleagues on the Curriculum Committee; and members of the Council of Students of Arts and Sciences. University colleges of Arts and Sciences, in curricular matters, justifiably are regarded as conservative and the most salient changes — the institution of a quantitative reasoning requirement for the A.B. degree and a more precise definition of the courses which fulfill the general education requirements — do not fully qualify as a curricular revolution. The changes appear more salient, however, if embedded in a historical context, for they reverse trends toward an unstructured and freely elective curriculum in the Arts and Sciences reaching back nearly 20 years.

The administration of the revised curriculum and, more generally, the affairs of the College of Arts and Sciences, will fall to the new Dean of the College, Linda B. Salamon. Dean Salamon, whose appointment was effective August 1, 1979, comes to Washington University from a background of training, teaching, and administrative experience at Radcliffe, Bryn Mawr, Duke, Bennington, Wells, and, most recently, the University of Pennsylvania. Her appointment is the felicitous outcome of the efforts of a faculty-student search committee chaired by Professor Robert McDowell of the Department of Mathematics. Dean Salamon will meet an undergraduate student body that is cosmopolitan, highly talented, and actively interested in the education it receives.

In March the Council of Students and the Faculty Council cooperated to organize a two-week-long symposium on liberal learning which ended with a faculty-student retreat to Trout Lodge. From the symposium emerged many proposals and recommendations which are likely to fructify discussions and developments in undergraduate education in the future.

This year’s results of national competitions continue to confirm the quality of student achievements. Seven Arts and Sciences students were awarded National Science Foundation fellowships. The Washington University team of George T. Gilbert, Tim V. Steger, and Philip Harrington, all seniors, which last year won the William Lowell Putnam Mathematical Competition, placed second in this year’s competition, ahead of Harvard, California Institute of Technology, and 335 other colleges and...
Arts and Sciences

who are older than those customarily enrolled for graduate study.

The academic year began with two persons newly at the helm of academic departments and programs. Professor G. Edward Montgomery succeeded Professor Stephen Molnar as Chairperson of the Department of Anthropology, and Samuel A. Hay, Director of Africana Studies at Purdue University, was appointed Director of Black Studies. At the end of the year, Alexander Calandra, who received the 1979 Robert A. Millikan Award of The American Association of Physics Teachers for excellence in teaching, became Professor Emeritus of Physics; and the eminent philosopher, A. William Levi, was advanced to David May Distinguished University Professor Emeritus.

Meanwhile, their colleagues of the Faculty of Arts and Sciences continued to win recognition for creative, scholarly, and scientific achievement. Ira J. Hirsh, Professor of Psychology, Director of Research in the Central Institute for the Deaf, and Dean Emeritus of the Faculty of Arts and Sciences, became the tenth member of the current faculty to be elected to the National Academy of Sciences; Professor William Gass of the Department of Philosophy, who succeeds to the David May Distinguished University Professorship, and John Morris of the Department of English, were specially honored by the American Academy and Institute of Arts and Letters for the excellence of their literary attainments; an international symposium at Argonne National Laboratories in June celebrated the distinguished scientific contributions of Professor Samuel I. Weissman of the Department of Chemistry; Professor C. David Gutsche, also of the Department of Chemistry, was appointed Chairperson of the Medicinal Chemistry Study Section of the National Institutes of Health; Professor J. H. Hexter, Distinguished Historian-in-Residence, became one of the few in the history of the Guggenheim Foundation to be awarded a third John Simon Guggenheim Memorial Fellowship; and Professor Martin Israel of the Department of Physics, who next year will assume the Chairmanship of the Division of Cosmic Physics of The American Physical Society, was chosen as principal investigator for one of the three cosmic ray experiments associated with NASA's launch of the Atlas-Centaur rocket in September. In addition, Associate Professor Gerald Izenberg (History), Associate Professor Edward Spitznagel (Mathematics), and Assistant Professor Richard Nault (Education) were recognized for their teaching by the Council of Students.

The Faculty of Arts and Sciences, however, was not an exception to the rule, applicable alike to universities and to the social order, that constructive change and distinguished achievement co-exist with perplexing difficulties. The gap between the rate of inflation and the rate of salary increases for faculty continues to cause nagging disquietude; scattered inadequacies in plant and physical facilities continue to burden the efforts of a few departments to reach the full measure of their teaching and research capabilities; long standing tensions between the careerist and non-careerist objectives in liberal arts education as well as between its quantitative and qualitative elements persisted; and the outcomes of the decision-making process in the award of tenure and promotion provoked widespread and sometimes ardent discussion, one result of which was the appointment of an ad hoc committee by the Council of the Faculty of Arts and Sciences to review the structures, policies, and procedures governing decisions concerning promotions and the grant of tenure. It also is bothersome that graduate school enrollment, after a decade of stability, declined last fall and that, notwithstanding a large class of freshmen last fall and the prospect of an even larger one for the coming fall, a downturn in the number of secondary school students graduating annually is imminent. Within the ethos of universities, however, problems become challenges to the faculty, students, and administration. They also are challenges to alumni and it is gratifying to conclude this report by noting that unrestricted gifts by alumni to Arts and Sciences reached a record high this year. Hopefully, this happy result presages a succession of record highs.

Ralph E. Morrow
Dean
Active celebration of the past during the fall semester and intense activity in planning for the future during the spring semester characterized the academic year 1978-79.

The University-wide celebration of its 125th anniversary in October gave the School of Architecture an opportunity to organize an exhibit in the Washington University Gallery of Art in Steinberg Hall on the design and architecture of this campus. A number of articles by Professor Emeritus Buford Pickens and Assistant Professor Margaretta J. Darnall produced a handsome publication on the same subject. Assistant Professor Bruno Pfister and John Fifield, a graduate of the School, also contributed to this publication a large drawing describing the "Ground Floor Plan," of the Hilltop Campus. Professor Laskey's second-year studio designed and hung a number of festive banners throughout the campus to commemorate the event.

As the Chancellor indicated elsewhere in this report, early in the spring semester the Board of Trustees authorized the creation of a high-level Commission on the Future of Washington University. The Commission will be made up of twelve Task Forces. One of them is the Architecture/Fine Arts/Gallery of Art composed of distinguished alumni, friends, and community leaders, which is chaired by Trustee, past faculty member, and distinguished alumnus George E. Kasabaum, President of HOK Inc. This Task Force will take a careful and objective view of the present programs and future plans of the School of Architecture and with faculty, students, and the Dean serving as resources, will eventually produce a report which should be very helpful to the School in its continued pursuit of excellence through the challenges of the '80s. The Architecture/Fine Arts/Gallery of Art Task Force had its first meeting on June 13, 1979. More meetings are scheduled for 1979-80, with completion of work tentatively projected at this time for the early fall of 1980.

Our student body continues to be one of exceptionally high quality. At both the graduate and undergraduate levels our admissions posture remains strong. We enjoy the luxury of selecting our students from a pool of well-qualified applicants which is holding steady. Admissions and recruiting is, however, an area in which we will depend increasingly on the good services of alumni and friends. By all demographic predictions the pool of applicants from which our students are selected will be smaller in the 1980s than it has been in the past. To this end we are increasing our recruiting activities by visiting selected urban centers around the country for interview sessions with prospective students. One happy by-product of this activity has been the opportunity to meet with alumni and reacquaint many with the activities and life in the School. We plan to expand these recruiting efforts and look forward to continued and growing alumni support in the years ahead of us.

If there is sentiment which characterized our students' attitudes during the past year I would describe it as serious-minded with a pragmatic sense of concern about the future. Will there be jobs? What is the state of the economy? What is the state of architecture in that economy? Happily the condition of the profession was extremely good this past year and I believe that our spring graduates were able to be quite selective about employment.

During the spring nine students in the Master of Architecture and Urban Design (MAUD) Program worked on Seventh Street in St. Louis. An attempt was made to create a connected whole from the Stadium to the Convention Center. This seven-block stretch has the potential for becoming the City's main street. The Spring Forum again drew a large audience composed in part of business executives, public officials, and representatives of interest groups. Visiting critics were Jonathan Barnett, AIA, and Richard Rosan, AIA, both of New York. Mr. Barnett formerly headed Mayor Lindsay's Urban Design team. Mr. Rosan was a member of the same group and today directs the Office of Economic Development for the City of New York. A lively debate followed a presentation of issues and proposals.

A revised MAUD curriculum was approved last year. It expands the course to two years. Students will spend their second year with a reduced academic load and will hold a Graduate Assistantship, either teaching in the M.Arch. program or working professionally in the Urban Research and Design Center. A second option enables regular Master of Architecture students to join the Urban Design program and complete requirements with only one additional year.

The URDC is in good shape. The scope of work has continued to grow with the energetic involvement of the Center's Assistant Director, Dave van Bakergem, who will also be Assistant Director of the MAUD Program.
next year while Professor Frants Albert is on sabbatical leave in California. The Center has expanded its involvement on the Washington University campus. Projects for the City and the State were completed and new work is on hand. A good number of students have received both experience and income through the URDC. Next fall a staff architect will be added.

The semester-long visitor program brought once more a number of distinguished individuals to the School of Architecture. During the fall semester of 1978 we hosted Stephen Gardiner from the United Kingdom, who also served as Harris Armstrong Lecturer. Jean Claude Steinegger and his wife Elisabeth, both architects from Switzerland, shared responsibilities for one of our graduate studios also during the fall semester. Colin Dollimore spent with us most of the spring semester in what became his third visit to the School since 1973.

Responsibilities for his studio during the month of March were shared by William Mullins, a senior partner in the London firm of Sheppard, Robson & Partners. Michael Jantzen, an artist and a builder, was also on our faculty as a visitor during the spring semester.

VARIOUS EVENTS flavor each academic year. The following is a partial listing of those which took place in 1978-79.

"Directions," a two-day symposium discussing the ways in which architecture is headed today, was held on campus early in November under the auspices of the School of Architecture. With support from many quarters—the local profession, individuals, and the Missouri Endowment for the Humanities—the Symposium examined both the course of the profession as charted by some of its leading practitioners and the attitudes which motivate them. Peter Eisenman, Michael Graves, Robert Stern, and Stanley Tigerman were the main visiting participants while Washington University faculty were represented by William Gass, Norris K. Smith, and Udo Kultermann. This symposium was organized by three of our graduate students: Terry Brown, Dan Enwright, and Steve Sobel.

During the spring semester 28 students took part in an architectural design competition sponsored by the Home Builders Association of St. Louis and the Home Warranty Council of Missouri. The competition, organized by Assistant Professor Bruno Pfister, was on the design of a typical townhouse in the historic Lafayette Square section of St. Louis, with focus on the need for continuity in one of the oldest parts of the city. David Woods, a graduate student in the School, won the $500 first prize. Other winners were: Ken Olsho, Nick Telowitz, Scott Lane, Dan Enwright, Robin Sen, and Vishvapriya.

About seven years ago the School of Architecture was given a generous sum of money to endow The Thurston C. Ely Architectural Scholarship in honor of Mr. Ely, a graduate of the School of Architecture who taught for many years at Roosevelt High School. Early in June, with the cooperation of all concerned, the Circuit Court of the City of St. Louis removed certain restrictions, making the scholarship available to high school graduates from the City of St. Louis, St. Louis County, and the state of Missouri. Roosevelt High graduates will have first preference. This court decision will effectively increase our scholarship funds, a very welcome event for our students and the School of Architecture.

Constantine E. Michaelides
Dean
I should like in this report to discuss some highlights of the Business School’s progress during 1978-79.

Washington University is one of the few major private universities in America which is committed to high-quality education in business on both the undergraduate and graduate levels. This unusual position is a source of strength for the School.

During 1978-79 enrollment in the Undergraduate (BSBA) Program reached 350. This was an increase from 140 students just five years ago. The faculty approved a target for total enrollment of 400 within the next two to three years. Demand for places in the program remains high with the consequence that our BSBA's are very well qualified. Almost 60 percent of the freshmen admitted for the fall of 1979 graduated in the top tenth of their high school class. We are pleased to have been able to maintain a highly qualified undergraduate student body while at the same time significantly increasing its size. This year's freshman class numbers approximately 80 students, up from 50 students two years ago.

One hundred and two BSBA's graduated during 1978-79. Approximately 60 percent were placed with public accounting firms, banks, and major corporations throughout the United States; 25 percent entered directly into graduate school, primarily law or business; and 15 percent joined family businesses, are self-employed, or are following other pursuits. One reason for the popularity of our Undergraduate Program is its flexibility to accommodate students having diverse occupational objectives.

Enrollment in the MBA Program was 378 in 1978-79: 204 studying full time and 174 pursuing the degree while working with St. Louis area organizations. The trend in quality of our full-time MBAs continues to be favorable. The incoming class for the fall of 1979 has an average score on the national admissions examination of 542, compared to 512 three years ago. Over this same period, the national average on this test has remained about 475. The 1979 graduates proved to be the most successfully placed MBA class in the School’s history. About 120 firms visited campus to recruit them. Their average starting salary was $19,350. Their most popular fields of employment were: marketing, 27 percent; commercial and investment banking, 23 percent; industrial finance and control, 16 percent; and public accounting, 12 percent.

The success in the marketplace of our BSBA’s and MBAs attests to the appropriateness of the curricula. Nevertheless, the faculty in 1978-79 approved comprehensive reviews of these curricula. These evaluations will proceed in 1979-80 under the academic directors, Professor C. William Emory and Professor Martin L. Bell.

The imposing responsibility of delivering our curricula, interacting with more than 700 students, and contributing to developments in the different fields of business rests
on our faculty. These 30 full-time scholars performed this responsibility on a high professional plane in 1978-79. At the risk of making glaring omissions, let me note some highlights or landmarks from the year:

Two faculty members started their academic careers at the School, Bruce D. Bagamery (Finance) and Doyle W. Banks (Accounting); they are Ph.D. candidates at Northwestern and Iowa, respectively. Our own Ph.D. graduate William J. Marshall (Finance) rejoined our faculty after a year’s absence. Three faculty members were recruited for positions beginning in the fall 1979: Kofi Nti (Quantitative Business Analysis, Ph.D., Yale); Richard L. Oliver (Marketing, Ph.D., Wisconsin); and Sharon A. Tucker (Organizational Behavior, Ph.D. candidate, Chicago).

Ross M. Trump’s 30-year career at Washington University came to a close when he elected to retire from active teaching effective the end of 1978-79. Ross Trump was Dean from 1954 to 1967, a period of significant development for the School. Since 1967, he has been one of the School’s most popular teachers in business policy and international business. He leaves the School a rich legacy of service.

James A. Anderson (Accounting) was granted tenure on the faculty. Rogene A. Buchholz (Business and Society), Richard C. Burgess (Finance), and William J. Marshall were promoted to Associate Professor. Jess B. Yawitz (Finance) and Lyn D. Pankoff (Quantitative Analysis) were promoted to Professor.

C. William Emory (Marketing) received an Alumni Faculty Citation at the Washington University Founders Day. He is only the fourth faculty member of the School to receive this award and the first since 1969.

Nicholas Dopuch, Professor of Accounting, University of Chicago, and Editor, Journal of Accounting Research, visited the School in the fall semester under a joint appointment with the Center for the Study of American Business. The highly successful research workshop he directed brought several of the country’s leading scholars in accounting to the School.


Jess B. Yawitz was Visiting Scholar at the Stanford Business School during the fall semester. Raymond L. Hilgert has been granted a sabbatical leave for the spring of 1980 to conduct work in industrial relations and personnel management.

Martin L. Bell, John E. Walsh, Sterling H. Schoen, J. Paul Peter published texts during 1978-79. Rogene A. Buchholz completed a study of how the curricula of the nation’s business schools treat the subjects of business and society and of public policy toward business.

William J. Marshall was part of a Washington University delegation which visited the People’s Republic of China in July to explore opportunities for exchange programs.

Sterling H. Schoen announced his resignation, effective June 30, 1980, as Director of the Consortium for Graduate Study in Management. Since he founded the Consortium in 1967, the Consortium has helped more than 700 minority students at six universities to pursue the MBA. Our School is one of the Consortium’s charter members.

Alumni support reached record levels this year. Nearly 30 percent of the School’s 6300 graduates made contributions, compared to less than 20 percent three years ago. Total alumni giving exceeded $125,000 for the first time. Over 550 alumni qualified for one of the School’s giving clubs, the Century Club, Fellows, or Eliot Society, representing growth of nearly 25 percent from the previous year.

Several innovations in the School’s alumni activities were successfully introduced or continued. The Scholars in Business Program was developed, providing individuals the opportunity to designate named scholarships for deserving students. More than 300 persons attended a cocktail party that our MBA student organization sponsored for St. Louis-area MBA alumni. A reception attended by several of our faculty was again held for Chicago-area alumni.

Mailings of my annual report for 1977-78 and of speeches by Reginald H. Jones of the General Electric Company and Nicholas Dopuch were well received.

We shall continue to be much more active than before in relating to, and calling upon our alumni. Their strong goodwill and loyalty is one of our major assets.

In every single way that matters, the Business School is stronger today than a year ago. Now it is time for the School resolutely to begin moving to a position of true national distinction for the quality of its educational programs and research. This lofty objective, which is nothing more than the goal of Washington University, can be attained. We start from a position of strength. Moreover, I sense that the various individuals, constituencies, and organizations whose performance, support, or assistance will be needed are prepared to deliver. It is this combination of outstanding potential and dedication to excellence which makes the Business School of Washington University an exciting place to be.

Robert L. Virgil Dean

Washington University Magazine
During the past year the School of Continuing Education significantly revised and enlarged its curriculum for University College audiences. As a result, part-time adult students of University College now have available several new certificate and degree opportunities, prepared in conjunction with several University faculties.

1. The professional undergraduate degree in Electrical or Mechanical Engineering is available to part-time working adult students who complete the University College pre-engineering curriculum. After earning credits equivalent to three full years of full-time study and meeting all pre-engineering requirements, University College students will transfer to the School of Engineering and Applied Science to complete their degree work.

2. In cooperation with the Urban Studies faculty of the College of Arts and Sciences, University College redesigned its certificate and area of concentration in urban studies. The restructured program is called Urban Administration.

3. A new Bachelor of Science degree in Data Processing provides a selection of intensive courses for students who hold undergraduate degrees but who wish to enter the computer field as professionals. The courses are designed to assist those expecting to enter the data processing profession, as well as those who are working in the profession but lack educational credentials.

In addition to these new and revised curricular offerings, several special faculty committees are reviewing the feasibility of new programs in the liberal arts, economics, health counseling, and health administration. These groups and others should provide continuing educational opportunities for the young emerging urban professionals of the greater St. Louis area.

Simultaneously, the most visible events of the past year were the extensive physical remodeling of the School of Continuing Education’s facilities in South Brookings Hall and the consolidation of the Summer School and University College staffs in these offices. The goal of the consolidation was twofold: improved services for students and increased efficiency in administering both units. To reach these objectives all student services, including academic advising and the new computer-maintained record system, were relocated in Suite 100, while the management staff was centralized in Suite 200. The space in January Hall formerly occupied by the Summer School is now home of the Center for the Study of Data Processing.

On May 16, 1979, after an eloquent address by Ben H. Wells, University Trustee and Chairman-Emeritus of the Seven-Up Company, the Chancellor awarded University College certificates—evidence of completion of two years of coursework in a field of concentration—to 61 students. A few days later at the University commencement ceremony, the College awarded 196 bac-calauarate degrees. Twenty-nine of these graduates were awarded Final Honors and twelve were elected to membership in Alpha Sigma Lambda, the part-time student honor society. In addition, 12 Master of Data Processing degrees were granted to this program’s third graduating class.

Throughout the year 4987 adults were enrolled for graduate and undergraduate credit in University College. Additionally, 51 persons registered as special not-for-credit students in the College’s courses. These enrollments represent a small decline from the previous year. The discontinuance of the undergraduate business degree and certificate programs is directly related to this reduction in enrollments.

The 1978 Summer Sessions enrolled 3451 students on the
Continuing Education

Hilltop Campus. This, too, represented a slight decline (three percent) over the previous year’s totals. Summer registrations reflect the strong demand for professionally related courses such as architecture, business, and engineering, plus the natural sciences. The humanities and the social sciences continue to show a decrease in registrations.

The Division of Professional and Community Programs which creates and directs all non-credit conferences, seminars, and short courses continued its reorganization. Alterations in the organizational structure resulted in several personnel reassignments, yet the Division produced a record number of programs that attracted 8787 participants. Most significant were the cooperative continuing education programs with the School of Fine Arts, which should serve as a model for other University divisions. The appointment of Marilyn Pryor, our most productive program specialist, as Director of the Division should bring additional vitality to our non-credit efforts.

The year saw continued growth from our alumni in support of the School. A record 1018 alumni contributed $28,850. This was made possible by the intensive efforts of our alumni workers. Led by Maia (Dolly) Schultz, these alumni volunteers increased the membership of the Century Club by 20 percent and were responsible for persuading six of our former students to become members of the Eliot Society. I am very grateful for this support and look forward to continued improvement.

The coming years will be especially significant for the School. The educational needs and demands of the adult part-time audiences are shifting. Students seeking baccalaureate degrees in non-professional studies are diminishing, but the demand for specialized career-related undergraduates and graduate programs remains high. Simultaneously, there are increasing pressures on colleges to provide competency based continuing education programs for audiences seeking official certification or relicensing. To be in a position to respond to these demands within the constraints of faculty resources is our major challenge for the immediate future.

The Center for the Study of Data Processing completed its first full year of operations with a budget surplus. The addition of Daniel J. Schoenekase as Assistant Director provided substantial support for the training seminars offered to the Center’s affiliated companies. Also, in cooperation with the Department of Mathematics, the Center opened its library, which is being officially dedicated this fall.

Richard J. Batt
Dean
If there is a key phrase that best characterizes the past year at the School of Dental Medicine, that phrase is "strengthen and solidify." Quantitatively, the School is restrained from significant further growth by financial and physical limits. Our primary thrust, therefore, must be the qualitative improvement of the School. We are gratified to report major progress in the past year, primarily in faculty development and in the continuing upgrading of our physical facilities.

A basic objective is the expansion of our core faculty of full-time teachers and researchers. We are deeply indebted to the part-time clinical faculty members who contribute so much to our educational program, but the School's betterment requires the addition of more excellent teachers to our full-time nucleus. A number of such gifted clinicians and teachers recently have joined our faculty:

Dr. Samuel Holroyd has assumed the chairmanship of our Department of Periodontics and also will teach courses in Clinical Pharmacology, a field in which he is internationally known. Dr. Herbert Abrams is a new member of the Periodontics faculty. Dr. Donald Gay will head a new Department of Maxillofacial Prosthodontics, located in the newly remodeled facilities of the School's Lasky Center.

Dr. Donald Gutting will teach in the Departments of Operative Dentistry and Fixed Prosthodontics, Dr. Michael Shoemaker has joined our Department of Removable Prosthodontics, and Dr. Guilan Nowrouzi has been added to the Operative Dentistry faculty. Another well-qualified specialist, Dr. Derek Nelson, will join the Department of Fixed Prosthodontics in January.

Two skilled young oral surgeons who have just completed our residency program in that specialty, Drs. David Ivey and Larry Pritchard, have joined the faculty of our Department of Oral and Maxillofacial Surgery. Dr. Ivey will work with oral surgery residents at Barnes and Dr. Pritchard will train residents as a member of the craniofacial team at St. Louis Children's Hospital.

A new Department of Dental Science also has been established and presently is chaired by Dr. Monika Strong. This department will present courses in dental materials and techniques, dental morphology, and related areas.

The current highlight of the School's physical plant improvement is the completion of a new senior laboratory area, which contains 96 bench positions for students and two supportive labs. This new area, which meets a longtime need, is located on the first floor of the Carlyn H. Wohl Research Center. A new prosthetics laboratory for the School's laboratory technicians also has been completed on the ground floor of the Wohl building.

Other recent improvements have included research facilities for bone and tissue studies and the completion of a new audiovisual production studio for the creation of self-instructional and other audiovisual materials. In the planning stage at present are the expansion of our Oral Diagnosis area to provide several new examining rooms, the building of a new central records room near
the reception area, and the modification of our advanced head and neck anatomy lab to accommodate several more faculty offices.

We eagerly await the utilization of the old A&P bakery building adjacent to the School, now jointly owned by the School of Medicine and ourselves. Planning for the renovation of the building and its joint use by the two schools is continuing, but is very complex due to the magnitude of the project. We anticipate that total development of this large structure is at least two years away.

We are now getting acquainted with the 85 members of our new entering class, the Class of 1983. These promising young men and women were selected from a pool of 2200 applicants. That number, large as it is, represents a sharp decline from last year's total of 3700 applicants. This decline was expected and is in keeping with a national trend.

The decline has continued for several years, but we anticipate a levelling off. In any case, our applicant pool was very substantial and certainly gave our admissions committee the opportunity to select an entering class of highly qualified and motivated students.

Our School continues to be a national institution in terms of the geographical makeup of our student body. Last year we had students from 27 states and six foreign countries. Always cognizant, however, of our responsibility to train health care professionals for our own region, we included 51 Missourians and 18 Illinois residents among our students last year.

As one class enters, another perforce must leave. We said farewell in June to 88 members of our Class of 1979 who received the degree of Doctor of Dental Medicine, along with eight other students who received postdoctoral degrees in dental specialties. This graduating class was the last to have completed the three-year curriculum model. As the transition to the four-year curriculum is completed, there will be no senior class in 1980.

The new curriculum continues to be the subject of intensive analysis and ongoing revision by our curriculum committee under the leadership of Assistant Dean Richard M. Diemer. Emphasis is being given to the seminar approach in clinical science subjects for seniors. In addition, behavioral science courses will be offered to students in each of their four years.

The cost of dental education is an ever-present concern for the School and, obviously, for our students. We are making every effort to limit the inevitable increase of tuition and fees to the minimums mandated by inflation. To this end, the School's expenditures are constantly monitored and held in check to the maximum extent possible.

The availability of financial aid to our students continues to be a critical problem for us, primarily due to the indefinitiveness of the federal government concerning the support of health care education. Some of our most urgent concerns in this area have been alleviated by funds made available for student aid through the generous bequest of Dr. E. Alfred Marquard. But there is no question that one of our major priorities must be the building of additional student loan funds.

Much of the burden of providing financial support for the School is borne by our loyal alumni and they continue to achieve one of the best giving records of any alumni group within the University. The past year has produced a gratifying improvement in support by alumni and also by non-alumni friends of the School. The number of Dental Century Club members increased by 129, the number of members of the Leroy R. Boling Associates increased by 71, and the number of dental alumni in the William Greenleaf Eliot Society went up by 10. A total of 83 alumni contributed to the School for the first time. Alumni support of the School was up to 36.4 percent, and the total number of dollars contributed increased by $15,657.74 (16.8 percent).

Members of our faculty continue to be active in national and international dental organizations and a number of them have held, or are in line for, top leadership posts. Dr. Samuel E. Gayer, for example, was recently President of the Federation of Prosthodontic Organizations, the highest elected position in the prosthodontic specialty. Dr. Mohamed A. Marzouk was Chairman of the Conference of Operative Dentistry Educators, and Dr. Alphonse Peterson was President of the American Academy of Dental Electro surgery. This fall, Dr. Jerome Spielberger will become President-elect of the Organization of Teachers of Oral Diagnosis. I will have the honor of becoming President of the International College of Dentists.

The School added a new community service project last year with the establishment of an Explorer Scout Post in Dentistry, sponsored by the School and supervised by a committee of faculty members and students under the leadership of Dr. Richard Brand. (Dr. Brand, incidentally, has made us very proud with his selection this year as the recipient of a Washington University Faculty Citation for outstanding teaching.) The Explorer Post has attracted a large number of young men and women from the community. Through it, they become acquainted with many facets of the dental profession.

A major service of the School to the dental profession is the presentation of outstanding continuing education programs featuring well-known clinicians from throughout the country. During 1978-79, we offered 21 such courses that attracted over 850 dentists and dental auxiliary personnel. An equally attractive schedule of courses has been planned for 1979-80.

Significant forward strides have been made during the past year. We look for continued progress in the year ahead. Our goal is excellence and we believe that goal is within sight.

George D. Selfridge
Dean
During the fall semester 986 undergraduate students were enrolled in the School of Engineering and Applied Science, up slightly from 946 the previous year. During the academic year the School granted 223 Bachelor of Science degrees. Both the undergraduate enrollment and the number of baccalaureate degrees granted are at their highest levels in over 25 years.

As reported last year, the School is operating at the limit of its capacity for undergraduate instruction, and admissions policies have been in effect for the past several years to prevent the enrollment from growing beyond its present level. Students enter either as freshmen or as upper-division students through the School's Three-Two Program, as discussed below. Target figures for students in these categories are 200 freshmen and 50 Three-Two students. Our goal is an undergraduate student body in the range of 900 to 1000, with transfer students being admitted in sufficient numbers to compensate for attrition losses.

The number of applicants for admission to the fall 1979 engineering freshman class was 1208, an increase of almost 300 over the previous year, and a three-fold increase over the 1969 class, which had 400 applicants. With a target figure of 200 admissions, the School was able to be highly selective in its admissions procedures. The academic quality of the incoming freshman class reflects this selectivity.

The Three-Two Program, under the direction of Assistant Dean A. Franklin Johnson, continued to generate interest and attention in the 90 liberal arts colleges that are affiliated with the School in this program. Under this arrangement, students attend one of the 90 colleges for three years, transferring to Washington University School of Engineering for their final two years. At the end of five years, the students receive a Bachelor of Arts degree from their liberal arts college and a Bachelor of Science degree from Washington University. Our experience with the Three-Two Program since its inception in 1974 has been excellent. As of June 1979, 77 Three-Two students have earned engineering degrees at Washington University. In the fall of 1979, 56 Three-Two students entered the program; in all, 92 Three-Two students are enrolled. With few exceptions, the Three-Two students are strongly motivated and have a serious and mature attitude toward their engineering studies. Most have done well academically and their prospects for successful professional careers seem to be excellent.

In the graduate engineering programs, 78 Master of Science degrees and 20 Doctor of Science degrees were granted. The number of graduate students enrolled in fall 1978 was 335, up from 319 the previous year. Graduate enrollments peaked in 1969-70 when 488 graduate students were enrolled in the School. For about the past six years enrollments have been relatively level.

With the increased numbers of engineering baccalaureate degrees being granted nationally, it seems probable that graduate engineering enrollments should begin increasing. Because the research done by most graduate students for their degrees is supported financially by outside agencies and sponsors, graduate enrollments are determined, to a significant extent, by the amount of research funding generally available and by the ability of the engineering faculty to write successful proposals to obtain these funds.

The demand for engineering graduates by industry continued to increase during the past year, and the number of corporations scheduling interviews in the Engineering Placement Office continues to grow. During the 1979-80 academic year the Engineering Placement Office anticipates visits by approximately 125 corporations and agencies. Of the 1978-79 graduates, 22 percent elected to continue their engineering studies in an engineering graduate school, 10 percent are continuing their education in professional and graduate schools other than engineering. 59 percent have accepted industrial employment positions and 5 percent have positions with military and government services.
Research activity in the School continued at a high level during the 1978-79 academic year. Total expenditures for research amounted to nearly $4 million. Almost all of this money was obtained from governmental agencies and industrial sponsors of research by the engineering faculty in a highly competitive environment.

Three new organized research laboratories have been established by the School. The Semiconductor Research Laboratory, with Professor Charles Wolfe of the Electrical Engineering Department as Director, was established to do research on compound semiconductor materials, devices, and integrated circuits. Emphasis is placed on training students in current research problems and state-of-the-art technology.

The Computer Systems Design Laboratory, under the direction of Professor Mark Franklin of the Electrical Engineering Department, will focus its attention on research in the areas of computer architecture and systems, and in particular in the application of recent advances in basic digital technology to problems having high computational requirements.

The Engineering Computer Laboratory, under the direction of Professor Richard A. Dammkoehler of the Computer Science Department, supports research-oriented computing needs of the School through its new DEC-20 computing system, which provides highly interactive computing service for scientific applications.

During the 1978-79 academic year the following faculty members were promoted to the tenured faculty: Curt Thies, Professor of Chemical Engineering; George Zahalak, Associate Professor of Mechanical Engineering; Rudolf Husar, Professor of Mechanical Engineering; and Lester Eastwood, Associate Professor in the Department of Technology and Human Affairs.

Two resignations from the tenure faculty occurred: William S. C. Chang, Samuel Sachs Professor of Electrical Engineering, resigned to accept a position with the University of California at San Diego, and Ian Rhodes, Associate Professor in the Department of Systems Science and Mathematics, accepted a position with the University of California at Santa Barbara. Tenured faculty members in the School now number 46.

During the 1978-79 academic year a total of seven new faculty members were added, while there were six resignations. Thus the total faculty increased by one and now numbers 67, which is about ten less than the authorized strength. The competition for first-rate engineering faculty is intense, both from other academic institutions and industry, and it is not expected that the School will be able to reach its authorized faculty strength in the next year or so. Meanwhile, adjunct faculty and visiting faculty enable the teaching obligations of the School to be met.

Several years ago it became apparent that the physical facilities of the School were inadequate to support its growing enrollments and research activities. A comprehensive plan, called the Engineering Facilities Improvement Plan, was developed which called for the renovation of much of the existing space in the engineering complex and the construction of a new building of approximately 40,000 sq. ft. to provide modern classrooms, laboratories, faculty offices, and administrative offices. The plan was approved by the Chancellor and the Board of Trustees and in June 1979 construction started on the new building. Architects for the building are the well-known St. Louis firm of Smith and Entzeroth in association with C. D. Michaelides, Dean of the Washington University School of Architecture. Construction is expected to take about 18 months. When completed, the building will go a long way toward providing the School with the kind of facilities that it needs to achieve its goal of becoming an ever more vital center of excellence for engineering in the midsector of the United States.

James M. McKelvey
Dean
HAVING “plowed and tilled” the soil in 1977-78, we who are concerned with the School of Fine Arts spent this year “seeding.”

The Schools of Fine Arts and of Continuing Education offered 22 non-credit courses ranging from the more traditional studio class in drawing to seminars such as Art as a Small Business, History of Fashion, Metalsmithing Workshop for High School Teachers, Chemistry of Art Objects, and Media. This past fall the two schools cooperated in planning and administrating an exciting new lecture series featuring the Fine Arts Faculty, “Meet the Artist.”

In conjunction with the Summer School, a Summer Art Institute offered two intensive workshops, one in metalsmithing and the other in painting, drawing, and printmaking. These workshops afforded experienced students and artists an opportunity to study with six nationally prominent visiting artists.

Course work for art majors continues to utilize off-campus connections as laboratories for learning. For example, a class project in Graphic Communication developed into a national competition sponsored by the nation’s largest balloon manufacturer for the graphic design of balloons. Junior and senior photography majors spent their Saturday mornings at a state-of-the-art photo processing laboratory in a newly opened St. Louis-based corporate headquarters, and were instructed by the chief executive officer of that corporation. By contrast, illustration, a strong aspect of the curriculum for many years past, has been reestablished in response to keen student interest and revival of marketplace demands.

A full-time position in the Fashion Design Department has been converted to the appointment of six practicing professionals from the community; a full-time Instructor has been added in Photography; Associate Dean Barry Schactman has relinquished his administrative duties to return to the classroom and full-time teaching; two faculty members appointed as assistants to the Dean will broaden administrative services and increase the availability of undergraduate advising.

PROFESSOR Edward Boccia was honored by being made a Knight of the Order of the Italian Republic by order of the President of Italy, Allesandro Pertini. Professor Heikki Seppa’s book, *Form Emphasis for Metalsmiths*, was released for publication in October. He also, by invitation of the Society of North American Goldsmiths, conducted workshops around the country. Major commissions were executed by Professors Richard Duhme, Jr., Robert Smith, and James Sterritt. Six one-man shows were held by the following faculty: Edward Boccia, William Kohn (sponsored by the Department of Fine Arts of Jalisco, Guadalajara, Mexico), Peter Marcus, Michael Marshall, Brian Meunier, Jon Palmer, and William Quinn. Works by Professors Arthur Osvcr and Barry Schactman were added to the collections of the American Academy and Institute.
of Arts and Letters.

Richard Hunt, renowned sculptor, joined the faculty as the second Distinguished Visiting Louis D. Beaumont Professor of Art. Other eminent art professionals who were among visitors to the School were artist Rafael Ferrer; designer Isador Seltzer; artist, ceramist, and Director of Visual Art at NEA James Melcher; international sculptor and Dubinsky lecturer Beverly Pepper; painter Oliver Jackson; artist and President of Women's Caucus on Art Lee Anne Miller; and New York art dealer Paula Cooper.

With financial assistance provided by the Missouri Arts Council, the School established a contract Printmaking Workshop and Teaching Center in Lithography and Intaglio. The School of Fine Arts has made a determined effort to secure funding to support and expand its existing programs and to initiate new programs which will serve its students, alumni, the St. Louis community, and the state of Missouri. The Richard Hunt "Three Places at One Time" Exhibition, held simultaneously at Laumeier Sculpture Park, Washington University Gallery of Art, and the Bixby Gallery, was partially funded by the Missouri Arts Council.

Today's art student is truly a university product. Costs in tuition dollars for art students taking classes outside the School, in other divisions of the University, were 17 percent of total annual costs for awarding the BFA degree in 1960, 24 percent in 1970, and will be 40 percent in 1980. That increase expressed in 1960 dollars has risen from $51,132 to $209,980!

Two areas require additional attention: faculty enrichment and pilot programs to develop and test experimental educational models, and scenarios for future involvement by traditional 18- to 24-year-old students and future 8- to 80-year-old art constituencies.

We are moving toward a long-range solution to the problems incurred through fine arts instruction being housed in five locations. In the meantime, Bixby Hall renovation and restoration have made significant strides forward.

Unrestricted annual giving to the School increased 47 percent during the 1978-79 fiscal year. The year 1979 marks the School of Fine Arts' 100th anniversary. "So far as my knowledge extends, this is the first university in the United States that has established a School of Fine Arts as a full department in equal rank with the rest," reported Chancellor William G. Eliot in his annual report in 1882. The Washington University School of Fine Arts was, indeed, the first in the nation to emerge as a part of a university. It is also the only university art school to have fathered a major metropolitan art museum.

We must be accepting of change in order to increase the chances for institutional survival in a time of shrinking budgets, rising costs, and persuasive public conservation. Art can little afford to maintain the image of a quasi-monastic order to be supported by the world's charity. All our beliefs and acts are responses to a complex social order, and these beliefs and acts reflect on the world just as complexly. We are, in the end, responsible for how we interpret the world and, in turn, affect others through our works. The visual arts have traditionally set standards for experimentation and may well be in an informed position to address the issues of what to do about the immediate future.

We look with confidence and excitement to 1980 as we begin our 101st year pursuing excellence and knowledge for an enriched harvest of outstanding artists.

Roger DesRosiers
Dean
Again, it was a very good year. But as in the song of that title, each year is different, even from other good ones. For us, the emphasis has changed some. The School of Law, having expanded dramatically during the 1970s, its faculty reinvigorated by senior and junior faculty appointments of exceptional ability, is strong in fact and spirit. The challenge in the near future will be to maintain remarkable institutional momentum, but in directions somewhat different from those of recent years.

Six years ago when I became dean, the School had recently moved into the new but incomplete Seeley G. Mudd Law Building; applications to study law here and elsewhere were the highest in history; our faculty was relatively young. The top priorities then were completion of the building to accommodate many more students than were originally planned, and expansion of the faculty, especially at the senior level. There were other challenges, of course, but these two have monopolized much of our institutional time during those years.

As summarized in earlier reports, the building has been completed, thanks to a generous gift from the estate of George F. McMillen, and the faculty expanded (and partly reconstituted) beyond even our most optimistic expectations. I found to my astonishment recently that I have hired more than half of the 28 full-time faculty members.

Having earlier persuaded several nationally known scholars of the highest distinction to join us, we have recently sought younger
professors of equally high promise. We have succeeded. Associate Professor Edward J. Imwinkelried, formerly of the University of San Diego Law School, will begin teaching here in the fall. He is a younger but experienced scholar in the evidence and trial practice area, widely published and known as an excellent teacher. After reviewing some 650 resumes and interviewing 35 candidates last year, we hired three beginners: John N. Drobak, a Stanford University Law School graduate who has been practicing in New Haven, Connecticut; Ronald M. Levin, a University of Chicago Law School graduate who has been practicing in Washington, D.C., and Robert B. Thompson, a University of Virginia Law School graduate who has been practicing in Atlanta. Blessed with outstanding credentials, all had many options. They will begin teaching in the fall.

We will miss the following departing colleagues, to each of whom we owe a great deal: Marilyn J. Ireland, who is joining the faculty of the California Western School of Law; Charles R. Haworth, who has returned to the practice of law in Dallas; David J. Newburger, who has opened a law office in St. Louis; Samuel H. Liberman, who will be working at the Legal Aid Society in New York next year, and Mark I. Weinstein, a clinical teacher who will be joining the faculty of the University of Pennsylvania Law School.

After a long debate, the faculty last year modified our grading system to make it more understandable to employers and students. Included in this revision was a new provision for mandatory grade medians to help standardize grades in different courses. The faculty also revised the seminar program, maintaining, however, a heavy emphasis on legal writing. Other curricular revisions are under continuing study, especially for the upper years.

Among the most exciting—and perplexing—recent developments in legal education is the introduction of "clinical law" into the curricula of virtually every law school in the country. Clinical law, the teaching of professional skills to students through work on real legal problems under the close supervision of a teacher-attorney, is hardly revolutionary. That is the way it was done in the last century before there were many law schools. But it is new in modern legal education. Tracking our colleagues in medical education, we have resurrected a variation of apprenticeship to ease the transition from theory to professional reality.

Our clinical program is now six years old. Two educators from other universities expert in clinical teaching evaluated it last year with considerable praise. Despite the existing quality of our program, here as elsewhere there remain many questions to be answered, such as the proper educational balance of "theory" and "skills" and the best method of integrating clinical training into the curriculum. Professor Liberman has been the director of the clinical program since its inception. With his and Mark Weinstein's departure, the time is ripe for a thorough rethinking of our clinical offerings. We are working over the summer to collect information. Next year, the faculty will undertake a major reexamination of clinical law teaching.

Our graduates continue to compete well for jobs all over the country. The market is tight, but the demand for well-qualified young lawyers remains high. During the past year we have studied the operation of our excellent Placement Office, which is directed by Assistant Dean Steven D. Korenblat. We have made several improvements, including a telephonic job bank for graduates.

A highlight of the year was our "Quest for Equality" series of nine one-day symposia, bringing to our school many of the outstanding legal thinkers of our time for a deep look into the elusive meaning of this fundamental American concept. This was the School of Law's contribution to the University's 125th Anniversary celebration. Professor Robert G. Dixon organized the series, which received national acclaim. Several of the lectures were videotaped and have been adopted for wide distribution by the American Bar Association and the American Law Institute. A generous grant from the Deer Creek Foundation made the series possible.

Alumni activities during the year have been many and varied, ranging from five lively reunions in June to pleasant gatherings in Chicago, Denver, Miami and Washington, D.C. The Alumni Association honored Professor Ralph Fuchs as its distinguished alumnus. The Alumni Association Executive Committee, under the able leadership of Stanley Rosenblum, met throughout the year to plan activities and advise the dean. Philip Maxciner is the new president. Annual giving last year again exceeded that of any other year. We are very grateful for this essential support, which provides the margin of excellence.

I have decided that next year should be my last as dean. By then, I will have served seven and a half years. My intention is to return to the practice of law, which I have missed increasingly. The "very good year" just completed was one of the best, and in many ways, the job of dean here is more satisfying than ever. But the pull of other challenges is growing. It will be time soon for me to move on.

During the coming year the search for my successor will take place. As I have written Chancellor Danforth, "That you will find an outstanding dean I have no doubt. He or she will preside over an outstanding School of Law."

Edward T. Foote
Dean
The School of Medicine has experienced another good year in 1978-79, and I am pleased to comment about it.

The number of students enrolled in our School in pursuit of the degree of Doctor of Medicine increased steadily during the late 1960s and early 1970s, and has remained rather stable for the last five years. In 1969 our total enrollment for all four classes was 380, while in 1978 it was 550. The number of applications remains very high. In 1977-78, there were 6550 applicants for the 120 places in the entering class.

Of the total number of students enrolled in the School of Medicine in 1978-79, 23 percent were women. Forty-four states, the District of Columbia, and four foreign countries were represented in the enrollment.

Last year, 198 students based primarily at the Kingshighway Campus were in pursuit of the Ph.D. degree in one of the biomedical sciences. This total represents a several-fold increase in the last 15 years, largely the result of development of the Division of Biology and Biomedical Sciences. These capable young men and women are preparing for careers in basic research and teaching. From this group will emerge many of the nation's leading medical scientists of tomorrow.

The high and steadily rising cost of medical education continues to present serious problems, one, of course, being the cost to the student. At present, the tuition for entering students is $5975. The amount of financial assistance required by students grows each year. In 1978-79, they received $1.5 million in scholarship and loan support. Our goal—never to lose a student for financial reasons—is becoming more difficult to achieve.

The reputation of a medical school rests upon its faculty. A measure of the national stature of our faculty can be determined from a few statistics. Three of the School's faculty are members of the National Academy of Sciences; seven are members of the Academy's Institute of Medicine. Thirty-five faculty members serve on Advisory Boards and Committees of the National Institutes of Health, and six on Health Resources Administration Advisory Boards and Committees. Twenty-nine faculty hold individual Career or Career Development Awards from the National Institutes of Health.

Another measure of faculty quality is their research. In a medical center such as ours, progress is rapid. Fresh discoveries continually add to the scientific knowledge that makes advances possible. I want to mention one recent breakthrough that holds promise for the treatment of diabetes. A medical school research team headed by Edward Mallinckrodt Professor of Pathology Paul E. Lacy has succeeded in transplanting insulin-producing cells between strains of rats. The transplants survived more than 100 days and were not recognized as being foreign cells by the recipient rats. Dr. Lacy's colleagues were Professor of Microbiology and Immunology Joseph M. Davie and Research Assistant Edward H. Finke. Their ultimate goal is to transplant pancreatic cells to a diabetic
person. It is hoped that such a transplant in humans will produce enough insulin hormone to eliminate the need for daily injections and thereby prevent the devastating complications that afflict millions of children and adults. Their research was financed by the Kroc Foundation in Santa Ynez, California, the Juvenile Diabetes Foundation in New York, and the National Institutes of Health. Many questions remain unanswered. Dr. Lacy and his colleagues have begun long-term studies directed toward resolving some of these questions.

It is the presence on the faculty of such unusually skilled, imaginative scholars that enables the School to attract substantial funds for research. In 1978-79, the School was awarded $44.5 million in research grants and contracts, the largest portion, almost $40 million, coming from federal sources.

Gifts to the Medical School from the private sector—alumni and other individuals, foundations, and corporations—are also essential to an institution that cannot be content with mediocrity. The School, for example, recently received a $1 million endowment from Mr. James S. McDonnell to establish the McDonnell Laboratory of Biochemical Genetics. This endowment was given in recognition of the highly talented scholars who vigorously pursue their research to make possible human life at higher levels of health, happiness, and creativity. Robert G. Roeder was named James S. McDonnell Professor in Biochemical Genetics. With this addition, the School now has 24 named chairs.

Today, there are 18 departments in the School of Medicine and nine divisions. In addition, there are eight programs in the allied health professions with a total of 240 students. The number of faculty members in the School with the rank of Instructor or above is 599 full-time, and 572 part-time (in practice or volunteer), for a total of 1171.

We continue to be very proud of the accomplishments of our alumni. We were delighted to receive the announcement last fall that Dr. Daniel Nathans, Class of 1954 and now Professor of Microbiology at Johns Hopkins University, had won the Nobel Prize in Medicine. This is the second time in the last ten years that an alumnus of the School of Medicine has won the Nobel Prize.

We may have the most modern physical plant in the world. Certainly with the completion next year of the West Pavilion of Barnes Hospital there will be few medical centers anywhere with such fine facilities. The School of Medicine is now actively planning a Clinical Sciences Building to be constructed on the property which formerly contained the St. John’s Hospital immediately north of the David P. Wohl, Jr., Memorial Hospital and the David P. Wohl, Jr., Memorial–Washington University Clinics.

During the past year a Learning Resources Center was constructed on the first floor of the Library. The Chronic Renal Dialysis Unit of the Department of Internal Medicine has been enlarged and moved to the terrace level of the East Pavilion, increasing the number of dialysis stations from 15 to 24. The Jewish Hospital of St. Louis is undergoing major renovation with extensive improvements in the Pathology Laboratories and in the Emergency Room.

I n winding up this Annual Report I should like to mention a major unrealized goal of the School of Medicine. A new library building is greatly needed. The present library collection is mostly housed within a building that was constructed 65 years ago, sharing this structure with the Department of Anatomy and Neurobiology and the Offices of the Dean and the Vice Chancellor for Medical Affairs. The library has been bursting at the seams for many years. There are now satellite structures on Taylor Avenue and at Tyson Valley. A new building for the 1980s and 1990s and beyond would represent a tremendous addition to the School and the Medical Center.

M. K. King, M.D. Dean

M. Kenton King, M.D.
A SCHOOL of social work belongs to at least two distinct but overlapping worlds. It must be a well-respected member of an institution of higher learning. It must also be responsive to the trends in the larger society, and to the needs of the providers and recipients of social services. In 1978-79, the George Warren Brown School of Social Work continued to meet these diverse challenges.

The faculty achieved many distinctions. Associate Dean William Butterfield was elected President of the Social Work Group for the Study of Behavioral Methods. He also launched an NIMH-supported five-year project to train social workers for primary health care roles. A new faculty member, Associate Professor David Gillespie, published his book, *Technostructures and Interorganizational Relations*. Assistant Professor Duncan Lindsay's work, *The Scientific Publication System in Social Science*, also appeared during the year. In addition, he founded a new journal, *Children and Youth Services Review*, of which he is the coordinating editor. Assistant Professor Eloise Rathbone-McCuan's co-authored book, *Adult Day Care: Community Work with the Elderly*, was selected by the *American Journal of Nursing* as one of the twenty-five important books of the year. Professor Martha Ozawa was appointed to a National Conference on Social Welfare Task Force on the Future Relationship between Publicly Funded Social Services and Income Support. Both she and Professor Aaron Rosen are currently members of the House of Delegates of the Council on Social Work Education. Assistant Professor Fredrick Smith was appointed by the National Association of Black Social Workers as Chairperson of its Ad Hoc Committee on Energy.

With the arrival of Michael Powell as Director of the Learning Resources Center, the School took several steps to strengthen its fine library. In consultation with the faculty, Mr. Powell and his staff have prepared a plan for the further improvement of the library. It includes reorganization of the documents room, redecorating the reading room and the study hall, purchase of additional shelving and installation of a new security system. This plan is currently being implemented.

Another important development last year was the expansion of the Video Center. Associate Professor David Katz was named its Director. The equipment was upgraded. The Video Center is now capable of electronic field production in color. In addition to serving the Social Work School, the Center makes available its facilities to other units of Washington University for training their students and for video production. It also offers workshops and support for community video.

The size of the student body has grown considerably in recent years. Although the School has been in existence for over half a century, more than one third of all its graduates received their degrees in the past five years. Last year, too, enrollment exceeded our projections. The number of foreign students and black students increased. There was also an increase in the number of students over 30 years of age. More than 30 states were represented in the student body. Two out of five students came from Missouri; the next largest number were from New York state. Historically, social work has attracted a preponderant number of women students; the trend continued.

Nearly 30 percent of the students received some type of financial award, including work study aid; about 50 percent obtained loans, including those from the School of Social Work reserve funds. The financial challenge confronting students was reflected in a larger number of those enrolling on a part-time basis. It is becoming increasingly evident that new sources and methods of student aid will have to be found if we are to retain our ability to attract a student body that is diverse, has promise of academic excellence and professional leadership, and is committed to a career in social service.

As part of their field learning, social work students provide thousands of hours of community service. Every student in the master's program is required to spend over 750 hours under supervised practicum. Approximately 150 local agencies are used for this purpose. Last year such fields of social service as child welfare; family service; corrections and criminal justice; health; mental health; school social work; services to the elderly; mental retardation; alcohol, drug or substance abuse; services to women; community planning; and group services were utilized by the students for their practicum learning.

The School last year created a new division of continuing education. Since his arrival in January, George Andrus, Director of Continuing Education in Social Work, has contacted all major public and private social agencies in St. Louis. He has completed a comprehensive survey of the training and staff development needs of social service personnel and agencies in the metropolitan area. Over 30 continuing education institutes and workshops will be offered in 1980-81.

In order to develop closer relationships with agencies, the faculty assumed responsibility for an active liaison with social welfare agencies in the St. Louis area. In this role faculty members visit agencies regularly so that the School and the practice community are mutually able to keep abreast of developments.

Helen Graber was appointed to the newly created position of Associate Director of Practicum. She has initiated a number of steps to strengthen the School's relationships with social agencies. Ms. Graber is also exploring ways to develop a new specialization in industrial social work.

In collaboration with the St. Louis University School of Social Service, last October the School hosted the Annual Conference of the Group for the Advancement of Doctoral Education in Social Work. Professor Aaron Rosen led this highly successful conference which attracted representatives from more than 40 schools of social work.
Among the prominent visitors to the School in 1978-79 were Arabella Martinez, Assistant Secretary for Human Development Services in the Department of Health, Education and Welfare, who delivered the Benjamin E. Youngdahl Lecture on Social Policy; Frank Ferro, Associate Chief, Children's Bureau; Gary Lloyd, Executive Director, Council on Social Work Education; Juan Ramos, Director, Division of Special Mental Health Programs, National Institute of Mental Health; and Peggy Papp, a noted expert on family therapy.

In the year under review the School of Social Work received a total of ten contracts and training and research grants from public and private sources. These grants and contracts enable the faculty to develop innovative and experimental training programs, and to undertake research on significant service delivery issues; these grants also provide much needed tuition and stipend support to students. We were recently informed that the George Warren Brown School of Social Work has been selected as the Regional Child Welfare Training Center for HEW Region VII. This award will reinforce the School’s leadership position in the area of child welfare.

With the growth in research and training grant activities, establishment of a continuing education program, expansion of the practicum office, and recruitment of new faculty, the School finds itself in acute shortage of classroom, seminar, and office space. A study is currently in process to explore ways to deal with this problem.

Thanks to the munificence of Bettie Bofinger Brown, the School of Social Work enjoys an enviable amount of financial stability and flexibility. Alumni support has increased in recent years. The School has been able to live within a balanced budget. However, this fiscal stability has in part been a consequence of two rather disturbing factors. First, we have become increasingly dependent on tuition revenues. Approximately 70 percent of last year's projected budget relied on income from student tuition. This disproportionate reliance on tuition income poses a special threat in the context of the impending decline in college-age population. Secondly, the School’s financial health has partially been achieved by keeping the size of the full-time faculty small. This situation cannot continue. To maintain the quality of our educational program, we must recruit additional faculty.

The goals for the forthcoming years, therefore, are clear: recruiting and retaining superior faculty; recruiting a promising and diversified student body; and making available to them a stimulating education of unparalleled excellence. The faculty of the George Warren Brown School of Social Work is determined to pursue these goals and to preserve the distinctive quality of its educational program.

Shanti Khinduka
Dean
Despite a sizable drop in the purchasing power of the dollar in the past year, Washington University has been able to maintain a sound financial base for the support of its primary academic objectives. Aided by increased generosity of donors and higher tuition rates, total revenue in the year 1978-79 increased 14 percent, and a reasonable balance was maintained between revenue and expense. For the total University, income exceeded expenditures so that there was a net increase in reserves. The central fiscal unit operated at a deficit, however, was less than budgeted.

Below is a brief analysis of total income and expenditures, operations of separate fiscal units, University assets and investments.

**TOTAL INCOME AND EXPENDITURES**

**Income**

The University has four major sources of support for activities represented by its expenditures. These are:

*Operating Revenue*

Total operating income, primarily from payments by those who benefited directly from the University's operation, amounted to $99,711,000. Student tuition and fees accounted for $34,296,000. Patient and laboratory fees for medical services provided by faculty and staff amounted to $23,021,000. Income from organized patient-care activities, such as the Edward Mallinckrodt Institute of Radiology, was $18,503,000. The auxiliary enterprises, including residence halls, food service, and bookstores, had income of $9,439,000. Other miscellaneous operating revenues totaled $14,452,000.

*Government Grants and Contracts*

A large portion of the research done by the University is sponsored by grants and contracts from governmental agencies, mostly federal, for specific sponsored projects. Total income from governmental sources expended in fiscal year 1979 was $49,455,000, an increase of $4,908,000 as compared with the previous year. Included in this total is $3,455,000 for scholarships and traineeships, an increase of $921,000 as compared with the previous year. In addition, 90 percent of the total $2,405,000 student loan funds issued under the National Direct and Health Professions Loan Programs was funded by the federal government.

*Private Gifts, Grants and Contracts*

Washington University received a total of $16,510,000 in gifts and grants from private sources for various purposes. In addition, $1,021,000 in private contracts was received during fiscal year 1979. Support from private, non-governmental sources for operating purposes amounted to $12,894,000. Recognized as current income was $10,911,000 which includes $2,062,000 in unrestricted gifts and $8,849,000 expended for sponsored research and other sponsored programs in fiscal year 1979. The balance of $1,983,000 received for operating purposes is being held for future expenditures on sponsored research and other programs. The ten-year chart reflects large unrestricted grant support from the Ford Foundation for the 1970 year and the Danforth Foundation for the 1973-77 years.

In addition to gifts for operating purposes, $3,935,000 was received for endowment, $678,000 for plant, and $24,000 for student loans. Major sources include alumni, individuals, business corporations, and foundations. A separate table presents a breakdown of the total by source and purpose.

**Expenditures**

The total operating expenditures of Washington University in fiscal year 1979 amounted to $163,791,000. In 1978 this figure was $145,216,000. Approximately 32 percent of the increased expenditures was attributable to instruction and student aid. Research, primarily supported by outside agencies, accounted for another 14 percent...
Ten Year Comparison of Income by Source
(in millions of dollars)

Revenue from Tuition and Services

Income Expended from Government Grants and Contracts

Private Gifts, Grants, Contracts and Bequests
Recognized as Operating Income

Endowment Resources Appropriated for Operating Purposes

Washington University Magazine
OPERATION OF SEPARATE FISCAL UNITS

Washington University follows a policy of making professional schools independent fiscal units wherever possible. Each of the independent units is responsible for supporting with its income the expenditures related to its operation, and each maintains an individual reserve of funds.

The Schools of Dental Medicine, Law, Medicine, and Social Work have been independent units for some years. The School of Engineering is a relative newcomer to this group. The central fiscal unit includes the Schools of Architecture, Arts and Sciences, Business Administration, Continuing Education, and Fine Arts, plus general University activities and services such as Olin Library.

The central fiscal unit is reimbursed for services rendered to the independent units. The central fiscal unit ended the year with expenditures and transfers to reserves for specific purposes in excess of income, but the results of the year were slightly better than planned. The Schools of Dental Medicine, Law and Medicine completed the year with income in excess of expenditures and reserve transfers, while the School of Engineering and the Computer Systems Laboratory ended the year with a deficit due to unexpectedly high costs of overhead and certain programs. The School of Social Work had planned to use reserves for transfers to student loan funds and for plant projects, which resulted in a small reduction of its year-end reserve balance.

Ten Year Comparison of Annual Expenditures (in millions of dollars)
Summary of Current Funds Revenues, Expenditures and Transfers From Reserves
For Separate Fiscal Units of the University
For Fiscal Year 1979
Thousands of Dollars

<table>
<thead>
<tr>
<th>Revenues:</th>
<th>Central Fiscal Unit</th>
<th>School of Engineering</th>
<th>School of Law</th>
<th>School of Social Work</th>
<th>School of Dental Medicine</th>
<th>School of Medicine and Related Activities</th>
<th>Computer Systems Laboratory</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuition and fees</td>
<td>$20,581</td>
<td>$4,541</td>
<td>$2,622</td>
<td>$1,362</td>
<td>$1,756</td>
<td>$3,434</td>
<td></td>
<td>$34,296</td>
</tr>
<tr>
<td>Government grants and contracts, including all overhead</td>
<td>6,815</td>
<td>3,038</td>
<td>28</td>
<td>372</td>
<td>675</td>
<td>37,691</td>
<td></td>
<td>$49,455</td>
</tr>
<tr>
<td>Private gifts</td>
<td>4,376</td>
<td>986</td>
<td>204</td>
<td>29</td>
<td>123</td>
<td>5,193</td>
<td></td>
<td>10,911</td>
</tr>
<tr>
<td>Endowment income (a)</td>
<td>6,092</td>
<td>610</td>
<td>357</td>
<td>342</td>
<td>25</td>
<td>6,602</td>
<td></td>
<td>14,028</td>
</tr>
<tr>
<td>Expired term endowment</td>
<td>1,388</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1,388</td>
</tr>
<tr>
<td>Sales and services—educational activities</td>
<td>1,281</td>
<td>241</td>
<td>22</td>
<td>11</td>
<td>63</td>
<td>4,011</td>
<td></td>
<td>5,746</td>
</tr>
<tr>
<td>Sales and services—auxiliary enterprises</td>
<td>7,846</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1,593</td>
<td></td>
<td>9,439</td>
</tr>
<tr>
<td>Patient and laboratory fees</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>862</td>
<td>22,159</td>
</tr>
<tr>
<td>Organized patient care activities—sales and services</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>18,503</td>
</tr>
<tr>
<td>Other income and additions</td>
<td>1,770</td>
<td>266</td>
<td>90</td>
<td>45</td>
<td>162</td>
<td>6,350</td>
<td></td>
<td>8,706</td>
</tr>
<tr>
<td>Total revenues</td>
<td>50,149</td>
<td>9,682</td>
<td>3,323</td>
<td>2,161</td>
<td>3,666</td>
<td>105,536</td>
<td></td>
<td>175,493</td>
</tr>
</tbody>
</table>

| Expenditures and mandatory transfers:                                                                     |                     |                       |               |                       |                           |                                           |                            |              |
| Instruction                                                                                           | 16,965              | 4,044                 | 1,249         | 835                   | 2,003                     | 34,413                                    |                            | 59,509       |
| Research                                                                                              | 4,034               | 2,322                 | 4             | 22                    | 82                        | 25,355                                    |                            | 32,344       |
| Academic support                                                                                       | 4,590               | 853                   | 1,033         | 529                   | 692                       | 4,982                                     |                            | 13,249       |
| Student services                                                                                       | 2,239               | 479                   | 139           | 106                   | 128                       | 911                                       |                            | 4,002        |
| Institutional support                                                                                  | 2,745               | 339                   | 137           | 96                    | 112                       | 2,084                                    |                            | 5,513        |
| Operation and maintenance of physical plant                                                            | 4,393               | 522                   | 348           | 186                   | 468                       | 5,678                                    |                            | 11,595       |
| Scholarships and fellowships                                                                            | 6,268               | 1,193                 | 314           | 90                    | 58                        | 943                                       |                            | 8,866        |
| Organized patient care activities                                                                       |                     |                       |               |                       |                           |                                           | 18,570       | 18,570      |
| Auxiliary enterprises                                                                                  | 7,455               |                       |               |                       |                           |                                           | 1,628         | 9,083       |
| Miscellaneous services                                                                                 | 24                  |                       |               |                       |                           |                                           | 133           | 157         |
| Mandatory transfers                                                                                     | 831                 |                       |               |                       |                           |                                           | 5             | 67          |
| Total expenditures and mandatory transfers                                                              | 49,544              | 9,752                 | 3,224         | 1,864                 | 3,681                     | 94,631                                    |                            | 163,791      |

| Transfers to committed reserves, plant, and other funds from revenues and prior years' accumulated reserves | 1,146               | 86                    | 63            | 301                   | (56)                      | 6,012                                     |                            | (30)         | 7,522       |
| Total expenditures and transfers                                                                         | 50,690              | 9,838                 | 3,287         | 2,165                 | 3,625                     | 100,643                                   |                            | 1,065        | 171,313     |

| Net effect of revenues, expenditures and transfers on general reserves                                   | $ (541)            | $ (156)               | $ 36          | $ (4)                 | $ 41                      | $ 4,893                                   |                            | (89)         | $ 4,180     |

(a) Endowment at market value with income for:
- Support of current operations $104,355                     $ 8,778       $6,120       $5,274       $1,282       $90,036                       $215,845
- Other purposes                                              5,079          1,904          28            36            3,576            $ 10,623
- Total endowment                                             $109,434        $10,682       $6,148       $5,274       $1,318       $93,612                       $226,468

Washington University Magazine 27
government grants and contracts. A separate fund is established for each project or purpose. The thousands of funds for which Washington University are accountable are handled in four major groupings: current funds, student loan funds, endowment funds, and plant funds. With the exception of income from the investment of endowment funds, the ongoing operating expenditures of current funds may not be offset by resources of the other three fund groupings. The Summary of Assets, Liabilities, and Fund Balances as of June 30, 1979, presents the assets and any claims against them for the four fund groupings.

Current funds must be separated between unrestricted and restricted funds. The unrestricted current funds consist of revenues from the various income-producing operations of the University, plus unrestricted gifts and unrestricted earnings from endowment. Expenditure of these unrestricted funds is left to the discretion of the University. Other funds available for current operations restrict expenditures to a given department or school, or for special, designated purposes such as research in a specified field or by a specified person. Unrestricted and restricted funds are combined in the overview of current operations of the separate fiscal units presented previously. They are kept distinct in the accompanying Summary of Assets, Liabilities, and Fund Balances.

As of June 30, 1979, the total assets of the current funds were $69,074,000, including restricted current funds of $17,048,000 and unrestricted current funds of $52,026,000. Accounts payable and other such liabilities against unrestricted current funds amounted to $14,835,000. Another $23,358,000 of the unrestricted current fund assets was encumbered or otherwise administratively committed for specific future purposes.

The reserves that are uncommitted totaled $19,665,000. To be deducted from that amount is the deficit of $5,832,000, accumulated over several years of insufficient income to cover the expenditures of the central fiscal unit.

The uncommitted reserves are those built up over the years by the independent fiscal units. By long-established policy of the Board of Trustees, these reserves are held available for use in future operations of the fiscal units by which they were generated. Their presence has removed the necessity for the central fiscal unit to go to lending agencies outside the University to obtain the additional funds necessary to meet its expenditures. The central fiscal unit has an obligation to return to the independent units the amounts drawn from their reserves.

Student loan funds totaled $21,055,000. The total student loan fund receivables was $18,054,000, of which notes receivable from current and former students amounted to $17,830,000. Outstanding loans to students included $14,427,000 under the National Direct and Health Professions Loan Programs, which were 90 percent funded by the federal government.

The book value of the endow-

### Summary of Assets, Liabilities and Fund Balances as of June 30, 1979

**Thousands of Dollars**

<table>
<thead>
<tr>
<th></th>
<th>Current Funds</th>
<th>Student Loan Funds</th>
<th>Endowment Funds</th>
<th>Plant Funds</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assets:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash and securities maturing within thirty days</td>
<td>$12,353</td>
<td>$4,537</td>
<td>$1,330</td>
<td>$18,412</td>
</tr>
<tr>
<td>Investments</td>
<td>17,434</td>
<td>6,953</td>
<td>1,372</td>
<td>210,960</td>
</tr>
<tr>
<td>Receivables</td>
<td>18,204</td>
<td>4,547</td>
<td>18,054</td>
<td>3,264</td>
</tr>
<tr>
<td>Plant</td>
<td>4,035</td>
<td>1,011</td>
<td>299</td>
<td>13,953</td>
</tr>
<tr>
<td><strong>Total assets</strong></td>
<td>$52,026</td>
<td>$17,048</td>
<td>$21,055</td>
<td>$246,589</td>
</tr>
<tr>
<td><strong>Liabilities and Fund Balances:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liabilities</td>
<td>$14,835</td>
<td>$1,101</td>
<td>$1,430</td>
<td>$15,146</td>
</tr>
<tr>
<td>Deficit</td>
<td>(5,832)</td>
<td>42</td>
<td></td>
<td>20</td>
</tr>
<tr>
<td>Deferred undistributed investment income</td>
<td>23,358</td>
<td></td>
<td></td>
<td>193,710</td>
</tr>
<tr>
<td>Encumbered and committed reserves</td>
<td>19,665</td>
<td></td>
<td></td>
<td>231,443</td>
</tr>
<tr>
<td>Uncommitted reserves of independent units</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Balance of funds</td>
<td>15,995</td>
<td>19,625</td>
<td>231,443</td>
<td>193,710</td>
</tr>
<tr>
<td><strong>Total liabilities and fund balances</strong></td>
<td>$52,026</td>
<td>$17,048</td>
<td>$21,055</td>
<td>$246,589</td>
</tr>
</tbody>
</table>
ment funds was $232,485,000 (not including cash or other assets; of this amount, $202,287,000 is in long-term investments), up $5,248,000 from the year before. The market value was $226,468,000, down $5,266,000 from the prior year. The market value associated with each of the separate fiscal units is presented along with the summary of expenditures and income for each unit.

Plant funds totaled $211,189,000. Of that amount, $193,192,000 was invested in land, buildings, books, and equipment. Total borrowing for physical plant facilities as of June 30, 1979, was $16,605,000, of which $9,848,000 represents Housing and Urban Development bonds for student housing and dining facilities.

INVESTMENTS

Income (interest, dividends, rents, etc.) from all investments for the year ended June 30, 1979, totaled $21,808,000, an increase of 27 percent over the $17,156,000 reported for last year. Endowment income for the same period was $16,089,000, an increase of 17 percent over the $13,717,000 for last year.

The market value of all investments (endowment, current, plant, student loans, etc.) including interfund advances (loans) and those securities maturing within 30 days, totaled $294,839,000 compared with $291,408,000 the preceding year.

The market value of endowment investments was $226,468,000 at June 30, compared with $231,734,000 the preceding year. A comparison of

endowment investments over the past ten years is presented on the accompanying chart.

Gifts, grants and net transfers to endowment funds totaled $8,731,000; therefore, the market value declined by approximately $13,997,000. The sharp decline in the large block of Ralston Purina common stock exceeded the total decline in market value.

At June 30, the total investment portfolio (including an additional block of common stock held in trust by others with a market value of $7,352,000) was diversified as follows:

- Cash and short-term investments 25.9%
- Fixed income 33.1%
- Equities 38.5%
- Real estate net of liabilities 2.3%
- Other .2%

The net income from security lending reached an all-time high and totaled $450,000 for the year, which was an increase of $243,000 over the preceding year. High short-term interest rates and increased volume accounted for this favorable result.

---

### Market Value of Endowment Fund Investments Fiscal Years Ended June 30

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Millions of Dollars</th>
</tr>
</thead>
<tbody>
<tr>
<td>70</td>
<td></td>
</tr>
<tr>
<td>71</td>
<td></td>
</tr>
<tr>
<td>72</td>
<td></td>
</tr>
<tr>
<td>73</td>
<td></td>
</tr>
<tr>
<td>74</td>
<td></td>
</tr>
<tr>
<td>75</td>
<td></td>
</tr>
<tr>
<td>76</td>
<td></td>
</tr>
<tr>
<td>77</td>
<td></td>
</tr>
<tr>
<td>78</td>
<td></td>
</tr>
<tr>
<td>79</td>
<td></td>
</tr>
</tbody>
</table>

- **Total**: 240
- **Equities**: 50
- **Fixed Income**: 40
- **Securities**: 30
- **Real Estate**: 20
- **Other Investments**: 10

Washington University Magazine 29
The 125th Anniversary celebration ushered in an excellent academic year—in many ways the best since I have been Chancellor. One can read in the preceding reports of accomplishments, of change, and of progress. To review the year gives some idea of the breadth and scope of Washington University activities. Faculty have made their marks in the sciences, in the arts, in the professions, and in the humanities. They have been involved locally, nationally and internationally. Students and staff have performed well and successfully.

I shall highlight certain positive aspects.

The future of the Hilltop Campus is tied up with the decision of able undergraduates about which college or university to attend. The freshman class entering in the fall of 1978 was selected from a record number of applicants. It was on paper the brightest ever. Over 60 percent graduated from high school in the upper 10 percent of the class. The average SAT scores continue to rise, moving counter to the national averages. Many freshmen were merit scholars. Washington University's reputation is catching up to reality, thanks in no small part to all those who help to tell our story—students and faculty, staff, alumni, and parents—for students will come here only if they know about us.

The undergraduates turned out to be even more impressive in person than on paper. They were stimulating to faculty and to each other. As reported earlier in this publication, they won national prizes, bringing honor to themselves and to Washington University. The four classes were filled with energetic young people having broad-ranging interests. They played a major role in the evolution of student culture, starting new organizations and revitalizing old ones. They built a creative and exciting social life. They sparked a symposium on liberal arts and made up a soccer team which reached the national finals. Thanks to generous donors, new student facilities were added and old ones improved to accommodate increased out-of-classroom activities.

The faculty were active and successful on a variety of fronts too numerous to be included even in the reports of the individual deans. It was a banner year for research and scholarship. Some of their national prizes and awards were mentioned earlier. The national press paid particular attention to Professors Barry Commoner, Stanley Elkin, Paul Lacy, and Murray Weidenbaum. Considerable effort went into the development and teaching of new courses. Planning for the new Arts and Sciences curriculum was completed. The Focus Plans for freshmen were strengthened. The faculty research effort continued to grow. A measure of its quality is the successful competition for scarce government funds. For the first time Washington University received over $50 million in new grant awards made by the federal government. The mere listing of books and publications, exhibits, presentations and readings would more than fill this entire report.

The campus seemed especially alive this last year. The great questions of the day—scientific,
by the Chancellor

A major continuing worry is that inflation has badly eaten into the purchasing power of faculty and staff. The take-home pay of American faculty has in recent years lagged behind the cost of living. The same is true for most other Americans, but the income of faculty has fallen not only behind the cost of living but has not kept pace with that of the average American. Faculty families see their standard of living slipping, not only absolutely but relative to that of their neighbors in business and in other professions. The pressures on junior faculty who are at the low end of the pay scale and who have no guarantee of permanent appointment are, of course, intense. The situation for faculty is especially unfortunate when it is recognized that our main service to society depends on attracting and holding some of the most gifted individuals in the nation and, indeed, in the world. To improve this situation remains the number-one priority for Washington University.

In our current political and economic environment many of our hopes go unfulfilled and our aspirations are delayed. Tuition goes up faster than we would wish and salaries more slowly. Some renovations are delayed. Laboratories and classrooms are more crowded than is desirable. The library's budget for new books lags further behind the inflationary costs and we make do with aging athletic facilities. We console ourselves with the thought that it is better to be long on ideas and short of money than vice versa.

I am continually asked what I think of our future. Gloomy prophecies are more popular than optimistic ones and somehow always sound more hardheaded and realistic, but I confess to being optimistic. It is worth remembering that we are involved in the most important work of society—educating the leaders of tomorrow, remembering the past, clarifying the concepts upon which our society functions, doing the basic research on which a brighter future depends. Our importance is recognized every time a family elects to pay tuition and every time Congress appropriates funds for research and for scholarships. We will have our ups and downs. We are now going through a stringent financial period.

The future of Washington University depends, appropriately, on our quality. We simply need to be better than others, harder-working and more imaginative. If we are always first-rate in our teaching, in our scholarship and research, our reputation will continue to grow. As long as we can maintain our sense of common purpose and our dedication to quality, faculty and parent participation in the recruitment of undergraduates has been essential. Alumni giving reached a new high of $2.4 million. The William Greenleaf Eliot Society now has a membership of 476. Local and national corporations supported us magnificently with gifts totaling $3.5 million, of which $2.3 million represents St. Louis-based companies. Of the total corporate gifts, $1.1 million was unrestricted and $2.4 million designated for special purposes. Many companies have made pledges that extend over several years. Included in this group is McDonnell Douglas Corporation's most recent pledge of $1.8 million for the McDonnell Center for the Space Sciences.

One could go on and on. There is a great deal for which we have to be thankful. Yet one hears from all sides that education and science are suffering financially, that independent higher education has serious problems, and that the number of 18-year-olds will decline, making problematic the successful continuation of many institutions.

Washington University is, of course, not immune from these and other problems. Not everything we do goes well. In any community of our size there are personal tragedies, some intensely private and some that affect all of us in one way or another. In addition, we, of course, have special institutional problems.

A major continuing worry is that inflation has badly eaten into the purchasing power of faculty and staff. The take-home pay of American faculty has in recent years lagged behind the cost of living. The same is true for most other Americans, but the income of faculty has fallen not only behind the cost of living but has not kept pace with that of the average American. Faculty families see their standard of living slipping, not only absolutely but relative to that of their neighbors in business and in other professions. The pressures on junior faculty who are at the low end of the pay scale and who have no guarantee of permanent appointment are, of course, intense. The situation for faculty is especially unfortunate when it is recognized that our main service to society depends on attracting and holding some of the most gifted individuals in the nation and, indeed, in the world. To improve this situation remains the number-one priority for Washington University.

In our current political and economic environment many of our hopes go unfulfilled and our aspirations are delayed. Tuition goes up faster than we would wish and salaries more slowly. Some renovations are delayed. Laboratories and classrooms are more crowded than is desirable. The library's budget for new books lags further behind the inflationary costs and we make do with aging athletic facilities. We console ourselves with the thought that it is better to be long on ideas and short of money than vice versa.

I am continually asked what I think of our future. Gloomy prophecies are more popular than optimistic ones and somehow always sound more hardheaded and realistic, but I confess to being optimistic. It is worth remembering that we are involved in the most important work of society—educating the leaders of tomorrow, remembering the past, clarifying the concepts upon which our society functions, doing the basic research on which a brighter future depends. Our importance is recognized every time a family elects to pay tuition and every time Congress appropriates funds for research and for scholarships. We will have our ups and downs. We are now going through a stringent financial period.

The future of Washington University depends, appropriately, on our quality. We simply need to be better than others, harder-working and more imaginative. If we are always first-rate in our teaching, in our scholarship and research, our reputation will continue to grow. As long as we can maintain our sense of common purpose and our dedication to quality, faculty and parent participation in the recruitment of undergraduates has been essential. Alumni giving reached a new high of $2.4 million. The William Greenleaf Eliot Society now has a membership of 476. Local and national corporations supported us magnificently with gifts totaling $3.5 million, of which $2.3 million represents St. Louis-based companies. Of the total corporate gifts, $1.1 million was unrestricted and $2.4 million designated for special purposes. Many companies have made pledges that extend over several years. Included in this group is McDonnell Douglas Corporation's most recent pledge of $1.8 million for the McDonnell Center for the Space Sciences.

One could go on and on. There is a great deal for which we have to be thankful. Yet one hears from all sides that education and science are suffering financially, that independent higher education has serious problems, and that the number of 18-year-olds will decline, making problematic the successful continuation of many institutions.

Washington University is, of course, not immune from these and other problems. Not everything we do goes well. In any community of our size there are personal tragedies, some intensely private and some that affect all of us in one way or another. In addition, we, of course, have special institutional problems.

A major continuing worry is that inflation has badly eaten into the purchasing power of faculty and staff. The take-home pay of American faculty has in recent years lagged behind the cost of living. The same is true for most other Americans, but the income of faculty has fallen not only behind the cost of living but has not kept pace with that of the average American. Faculty families see their standard of living slipping, not only absolutely but relative to that of their neighbors in business and in other professions. The pressures on junior faculty who are at the low end of the pay scale and who have no guarantee of permanent appointment are, of course, intense. The situation for faculty is especially unfortunate when it is recognized that our main service to society depends on attracting and holding some of the most gifted individuals in the nation and, indeed, in the world. To improve this situation remains the number-one priority for Washington University.

In our current political and economic environment many of our hopes go unfulfilled and our aspirations are delayed. Tuition goes up faster than we would wish and salaries more slowly. Some renovations are delayed. Laboratories and classrooms are more crowded than is desirable. The library's budget for new books lags further behind the inflationary costs and we make do with aging athletic facilities. We console ourselves with the thought that it is better to be long on ideas and short of money than vice versa.

I am continually asked what I think of our future. Gloomy prophecies are more popular than optimistic ones and somehow always sound more hardheaded and realistic, but I confess to being optimistic. It is worth remembering that we are involved in the most important work of society—educating the leaders of tomorrow, remembering the past, clarifying the concepts upon which our society functions, doing the basic research on which a brighter future depends. Our importance is recognized every time a family elects to pay tuition and every time Congress appropriates funds for research and for scholarships. We will have our ups and downs. We are now going through a stringent financial period.
Provost Davis and Chu Wu-Hua, president of Shanghai Jiaotong University, record the cordiality of Jiaotong’s welcome of Washington University representatives.
China Markers

By James W. Davis
Associate Provost and Professor of Political Science

On July 7, 1979, twenty-one representatives of Washington University, the University of Missouri-St. Louis, and the International Institute in St. Louis assembled at Lambert International Airport for the start of a three-week trip to the People’s Republic of China. We arrived home July 31 — stimulated, tired, informed, excited. This brief article reports on that trip.

The China trip had its beginnings in November 1978, when Washington University was visited by a delegation of faculty and administrators from Shanghai Jiaotong University, an engineering school well known and respected in China. During that visit a sister-university relationship was agreed to in principle. In January 1979, a brief and very general document agreeing to faculty exchanges over the course of the next three years was signed. The July trip was a response to Jiaotong’s return invitation, and in part was to enable us to work out the details of our faculty-exchange agreement. Of course, the trip had other purposes as well. We all wanted to see China, to find out what we could about its present state, recent past, and likely future. Each of us had particular disciplinary interests and wanted to establish contacts with professional colleagues. In addition, the establishment of a sister-city relationship between St. Louis and Nanjing (Nanking) was on the agenda.

Putting together a more than three-week trip for a number of busy university faculty is no simple task—as Professor Stanley Spector can testify. Planning began in the early spring, as a number of likely faculty members were invited. Several declined, many accepted, and the cancellation/substitution game began in earnest. It was complicated by the fact that Jiaotong University had to approve a Chinese sister university several thousand miles away is neither quick nor simple. After approval from Jiaotong, visas were obtained from the Chinese embassy in Washington. A few last-minute additions to the list of delegation members and holding our breath. Approval arrived from China with only days to go.

The University delegation as finally constituted included: Spector, professor of Chinese studies; Robert Boguslaw, professor of sociology; Anna Peterson, executive director of the International Institute of St. Louis; Raymond Wittcoff, a member of the University’s Board of Trustees, and Mrs. Wittcoff; William Chang, Samuel C. Sachs Professor of Electrical Engineering; Jerome Cox, chairman and professor of computer science; William Jones, professor of law, and Mrs. Jones; William Marshall, professor of business administration; Robert McDowell, chairman and professor of mathematics; Martin Silverstein, professor of mathematics; Pat Lee, a WU alumnus who represented the dean of the School of Architecture; Thomas Sandel, chairman and professor of psychology; Lewis J. Thomas, director of the Biomedical Computer Laboratory, and Mrs. Thomas; Betty Pei-shan Yue, senior lecturer in Chinese; Herbert Weitman, director of photographic services; Everett Walters, vice chancellor of the University of Missouri, St. Louis, and Mrs. Walters; and myself.

Even as the delegation was being assembled and reassembled, planning had to go forward with regard to exact dates, cities to visit, and a detailed itinerary. In the end, we left without that. The one we received from our hosts when we arrived in Shanghai was changed within a few days of our arrival. Plans, it turned out, were always contingent. Travelers who insist upon knowing precisely what they will be doing a week in advance, or even a day in advance, may be uncomfortable in China—as may travelers who want to control their own schedules. Being master of your own fate in China falls somewhere between unlikely and impossible. You must content yourself with giving suggestions to your host or guide, then simply relaxing and accepting what comes. In part because of the constant language problem, our hosts planned our schedule and made many of our appointments. Because they did not want to disappoint us, the plans commonly were not announced until they were well fixed.

While overall plans and arrangements were being made for the delegation, each member was busy attending to individual chores—securing passports and getting shots, registering Japanese cameras and tape recorders with customs, making last-minute purchases. Since I had read reports that travelers without a current smallpox vaccination were unceremoniously shot in the Shanghai airport, I elected to be inoculated before leaving, and while I was at it I got protection against virtually all ailments. To my disappointment, no one has yet looked at my freshly updated medical record—not one in China, no one in Japan, certainly no one at home.

Lest anyone think that getting ready for an overseas trip is routine for today’s university sophisticate, be assured that going to China is not yet routine. We all read widely, did our homework, and conferred with each other, but in the end most of us found that we overestimated by a good measure the hardships to be endured. Food was simple and good, tea and soft drinks were always in front of us, medical care was acceptable, the heat was bearable, and the plumbing generally worked—after a fashion. On the other hand, telephoning across town bordered on impossible. Telephone books do not exist in China and the voice on the other end is (not surprisingly) unlikely to speak English. And if phoning was maddening, driving was absolutely hair-raising. Chinese drivers are determined, while pedestrians and cyclists are oblivious to risk. The combination is not for the faint-hearted.
REady or not, we left on July 7. After an overnight stay in Japan, we left Tokyo on July 9 bound for Shanghai on CAAC—the airline of the People’s Republic. The cabin attendants wore blue pants and white shirts, the smoking section was universal, no one mentioned seatbelts, and baggage was put anywhere—including the overhead rack. Casual is the word that applied to this airline—the very opposite of Japan Airlines. Some five hours out of Tokyo we arrived late in the afternoon in Shanghai. We stepped off an air-conditioned plane into what might have passed for a sauna. Eyeglasses and camera lenses instantly fogged; disembarking passengers gasped. We had arrived in China.

We were met by a delegation of administrators from Shanghai Jiaotong and whisked through the airport with nary a glance at immigration, customs, nor health authorities. Some of our number who had laboriously filled in their customs declaration forms were a bit let down. Some worried about how we would fare getting out, since our forms were not stamped when we arrived. The applicable Chinese proverb, however, was “Not to worry.”

Loaded into cars and buses, we sped through the suburbs to our hotel. The trip provided many of us with our introduction to the sights, sounds, and smells of Asia in general and of China in particular. There was noise—lots of it. Every horn was honking. We could barely talk above the din, which was all the more remarkable given the relatively few vehicles on the road. Horns were doing duty for brakes, for steering, for common sense. The cyclists were ringing their bells; some never took their hands off the bell. Drivers seemed skillful, but foolhardy. Chicken can be not only cooked but played Chinese style.

People were everywhere—on the road, by the road, in the fields, in front of shops, on the sidewalk. They were walking, sitting, working, reading—all outside. The sidewalk is the Chinese living room, family room, laundry, study, rumpus room, and more. The odors of kerosene, charcoal, and night soil mingled with the smell of cooking food and badly tuned engines. We were in the Orient.

In thirty minutes we had arrived at our hotel, the Ching Chiang, and received our room assignments—comfortable by any standard, luxurious matched against expectations. Rooms came with air conditioning (not individually controllable, to be sure, and a bit erratic, but far better than nothing) and plumbing that was dated but functional. The Ching Chiang, a French hotel before liberation, is now, of course, run by the State—as is virtually everything. I was given two rooms—a sitting room and a bedroom—furnished with overstuffed slipcovered Chinese interpretations of 1920 American furniture.

We met for dinner in the hotel dining room on the eleventh floor, where the real newcomers to China quickly began
Toward the end of their visit, WU travelers were received in Beijing by Chinese Vice Premiere Wang Zheng.

The main quadrangle of Jiaotong University dominated by a huge statue of Chairman Mao.
China Markers

Professor Lewis Thomas, director of the Biomedical Computer Laboratory at the School of Medicine, at the Workers Sanitorium in Wuxi.

to master the art of eating with chopsticks. The food was satisfactory. Contrary to accounts of other travelers, the food at this hotel was not the best on the trip, but it served its purpose well enough. After dinner we assembled at the hotel for our first formal meeting with our Jiaotong hosts and representatives of several other institutions in Shanghai. All of the Chinese were introduced individually and I, in turn, introduced the members of our delegation. Our schedule was reviewed for us; we were asked to comment or make suggestions. We then broke up into smaller groups—each of us meeting with people sharing common interests—and we began to make arrangements to give lectures in various subjects at various universities. I was invited to talk to a class in international politics at Fudan University and to lecture about American government to an English class at the Shanghai Foreign Language Institute. Virtually everyone in the group was asked to talk somewhere in Shanghai, but the mathematicians and engineers in our midst were in constant demand.

I began that evening to learn the art of using an interpreter. One speaks to the other principal, not to the interpreter. One does not ask the interpreter to say anything. One simply talks and pauses to let the interpreter translate. It is easy to forget to pause, to just keep talking, while the interpreter’s face takes on an increasingly uneasy, then desperate, look. Throughout the trip we often stopped each other from going on and on well past the point of accurate interpretation. We learned that a sentence or two would be translated more or less verbatim; longer passages would be summarized. That, obviously, was how things got lost in translation.

The “three S” rule was useful—slow, short, and simple. Slowly spoken basic English is not the native tongue of the American professoriate. Our rapid academic jargon and complex sentences make life difficult for all but the best or the most casual interpreters.

The next day in Shanghai we began a round of lectures, discussions, banquets, tours, and sightseeing that would last for nine days. Every participant has a different set of impressions, a different list of highlights. The observations that follow are largely mine.

Shanghai itself is the largest city in China and one of the largest in the world, with sixteen million inhabitants. It is not only large, it is crowded. Indeed, the strongest impression of the city is one of density—with people four, five, and six deep everywhere and queues on every corner. Even during an early morning walk at 5:30 or 6:00 a.m., one finds crowded streets—people on the way to work, people exercising, people opening shops, people shopping, people walking, people cycling. Only an occasional motor vehicle with horn honking will go by. And—as happened to a number of us—someone is likely to stop to practice English, to say hello, to ask whether one is American, and so on. Such an English conversation on the street invariably draws a curious silent crowd.

On a late evening stroll—as we found on our first night in Shanghai—the street is even more crowded, though there is not as much purposeful activity. Families sit outside, fanning themselves to keep cool, playing cards, talking, simply sitting, dozing. Occasionally, teenage couples stroll along hand in hand. It occurred to me that if at home we had less space indoors, less comfort indoors, less activity indoors, just simply less to do and less money to do it with (no TV, no radio, no air conditioning), our streets too would come alive with nightlife.

Our first visit to Jiaotong was formal. The entire delegation was received by the administration and leading members of Jiaotong University in the Council Room, where everyone was seated at tables. There we were welcomed officially. I responded for the University, feeling only a little strange standing beneath large portraits of Chairman Mao and Chairman Hua, telling those present how delighted we were to be in China, and how we looked forward to working with our sister university. The strange feeling (was it a feeling of rapid progress or sudden change?) persisted as I observed that we were being warmly welcomed in a room containing, as well, larger-than-life portraits of Marx, Engels, Lenin, and Stalin. (Virtually everywhere we went we found the same portraits. When we finally asked about the presence of the Stalin portrait, we were told that while the Chinese recognized that Stalin had made mistakes, he was indisputably a great Marxist.) While its rhetoric proclaims the PRC a Marxist/socialist/communist state, in practice it is clearly prepared to compromise; to take both lessons and assistance from capitalist friends.

After our formal welcome, we all trooped outside for a formal portrait and then toured the campus—visiting displays and laboratories and having various buildings and monuments pointed out. The main campus is dominated by a massive statue of Chairman Mao, though no one mentioned either the statue or the chairman. I developed the impression that for many there is a deep sense of affection for the memory of Premier Zhou (Chou En-lai), but such feelings did not seem associated with Chairman Mao. Perhaps he is associated not only with the long march and liberation, but also with the cultural revolution and the Gang of Four.

My impression of Jiaotong is that of an engineering university working hard to catch up and improve. For a Chinese university, it has a long history (it was founded in the 1890s) but China has never had substantial resources to devote to its universities. During the cultural revolution, Jiaotong—and all Chinese universities—suffered greatly. Faculty members were
confined, reassigned, and physically abused. No teaching went on, and no learning. In the last two or three years, the universities, functionless for a decade, have only begun to recover. Although they see that they must catch up, they face a serious lack of resources. In a variety of scientific and engineering fields and in the teaching of English, serious efforts are under way to make up for that sterile decade. The cultural revolution was an intellectual cul de sac—or worse. It is unclear whether such upheavals can be avoided in the future, but for the present, it is a very hopeful sign that so many American universities are taking an interest in their Chinese colleagues. When the newness wears off and China is less fashionable, there will still be much to do.

In addition to our formal meeting at Jiaotong, we had a number of working sessions of various sorts. Five of us met with five members of the Jiaotong administration on three separate occasions to define further our sister-university relationship and to talk with faculty members interested in visiting Washington University. Professor Spector and I spoke with the administration and representative faculty members about the governance of American universities. Some of the mathematics and engineering faculty spent considerable amounts of time working with Jiaotong colleagues in comparable fields. One of our number even managed to undergo acupuncture in the university clinic. In all, we got to know Jiaotong fairly well. A high point was a banquet in our honor hosted by the vice chairman of the University Council. The chairman of the University Council is also a Vice Premier of the People’s Republic of China. We met with him at Beijing (Peking) several days later.

During our stay in Shanghai, our delegation also was formally received at Fudan University, where many of us talked with colleagues individually. Fudan has no engineering school but contains many arts and sciences departments, so that those without professional colleagues at Jiaotong frequently found them at Fudan. I had a rewarding discussion with the chairman of the international politics department. We spoke, among other things, of Soviet-American relations and arms control and I listened to his views on SALT. It was clear that he was a hard liner. I also listened with interest to his perspective on the Korean conflict. Later in the week I lectured to his class. The fifty or so students appeared to have good command of English (laughing at my jokes before they were translated) and I was queried on such topics as Chinese-American relations, Chinese-Soviet relations, and the problems of Vietnamese refugees. The students were clearly well informed and concerned. I talked also at the Shanghai Foreign Language Institute, while other delegation members lectured at hospitals and at Shanghai Teachers College.

A feature of Chinese universities that clearly distinguishes them from their American counterparts is their party apparatus. Party influentials are not necessarily also the obvious university administrators. It is as though there were two lines of authority—real/party and symbolic/conventional administration. Since there is some overlap (a substantial amount, the closer one gets to the top), the picture is more complex than simply two lines. Sometimes department chairmen are in the party, sometimes not. Yet every department has a party committee and the party structure continues up to the top of the university, and beyond. The most obvious external result of these parallel and intermittently overlapping structures is that it complicates communications and decision-making. Formal titles do not necessarily mean what they would in the United States; finding out who has power involves a good deal more than simply looking at a chart of the university administration.

Our time in Shanghai was not spent solely on campus. Far from it. One morning the whole delegation visited a commune about an hour outside Shanghai, where in addition to seeing the livestock, visiting a clinic, and seeing various craft and tool shops, we had the benefit of a detailed briefing by a commune committee member. We also enjoyed a splendid lunch of

Professors Robert McDowell (right center), chairman of the department of mathematics, and Martin Silverstein, also mathematics, with members of the faculty at Beijing University.
Members of the WU delegation prepare to enter a computer room at Qinghua University in Beijing. Third from left to right are Professors Sandel, McDowell, Jerome Cox (chairman of Engineering’s computer science department), and Thomas; and Jane Thomas.

China Markers

China Markers

China Markers

commune-grown produce. In Shanghai, in addition, we had plenty of opportunity to visit small shops, the Shanghai No. 1 department store (where the array of goods was impressive) and the Friendship Store, for foreign nationals and overseas Chinese. (The array of goods here was even more impressive, but off limits to local residents.)

I was struck, however, not only by the array of goods, but by certain other observations. Watches were priced at about two or three times a month’s wages, for example. One store had a large selection of small flashlights, but no batteries to fit them. Another had several cassette recorders, but no cassette tapes. In fact, I was told that such tapes could not be procured in Shanghai. It was common to hear the expression “Sold out.”

A highlight of our stay in Shanghai was a cruise down the Huangpu River. It reminded me a bit of a comparable trip on the Chao Phraya in Bangkok some years ago. Shanghai is an active port city where ships from many countries lay at anchor. There is an active river life—with boats, barges, and junks of all descriptions moving in all directions. One of our more exciting moments came when we found ourselves sandwiched between a lengthy barge tow in front and a rapidly closing cargo vessel behind. An angry and shouting harbor master came alongside, ordering the freighter to stay back. Fortunately for us, it did. Beyond just showing us life on the Huangpu, the trip downriver and back gave us a chance to see just how far Shanghai extends and provided an overview (or rather a river view) of Chinese industrial development. We saw also a number of aging naval vessels, which we were strictly forbidden to photograph.

In the interstices between official engagements, we managed to do other things. Some of us engaged in exercise early in the morning—along with the local residents. Some paid early morning visits to the markets. Virtually all of us went to see the Yu Garden with its famous dragon wall. I visited a tractor factory and engaged in a lengthy conversation with the plant manager in a conference room decorated with the ubiquitous photographs of Marx and Engels, Lenin and Stalin, as well as Mao and Hua. One afternoon we saw the botanical garden and at other times several of us visited area schools and hospitals. In all, we had a remarkably active stay in Shanghai.

In addition to seeing Shanghai, during our stay there we began to learn something of life in contemporary China. Three facets stood out. First, grain, including rice, is rationed. I was told that the ration is fifteen kilograms per person per quarter, but that that was ample. Vegetables and fruit are not rationed. Second, housing is in very short supply and is assigned by and rented from either the employer or the Municipal Housing Bureau. One lives in the space provided and moving has obvious risks unless other space is provided. By the same token, members of
communes may not move away without permission. Jobs are assigned by the Labor Bureau. The faculty members at Jiaotong, for example, are there because that is their assignment. They can move only if they receive different assignments.

Obviously, China is regulated to a degree unknown in this country. I had known that, of course, before I left home, but confronting the reality first-hand forced me to think about this very different social system. Unquestionably, freedom as we know it is limited; yet there are one billion people in China, the country is poor, and it feels that it must modernize as rapidly as possible. It was clear at minimum that to apply Western standards or expectations would be wholly inappropriate.

On the morning of July 18 (at 4:30 a.m., to be precise) we put our luggage outside our doors and prepared to leave Shanghai for the next stop on our trip—Suzhou (Soochow). (When we arrived in Shanghai, we had planned to go from there to the Yellow Mountain area, but transportation turned out to be difficult and our hosts thought that trip would be too arduous—so our schedule was changed.) We were bused to the train station about 5:30 in the morning and by 6:00 we were on board, headed toward Suzhou, a city with a reputation for beautiful gardens and beautiful women. The trip lasted no more than an hour and a half. Along the way we ate box breakfasts, drank hot tea, and enjoyed the cool early morning air. The train was clean and reasonably comfortable, though not air conditioned, with screens on the windows and ceiling fans in the coaches. The roadbed was excellent. We watched the countryside.

Our day in Suzhou, pleasant and interesting, was pure tourism. After a brief rest in the hotel lobby and a cup of tea, we set out on our bus to see the sights. First stop was a silk embroidery factory where we watched young women painstakingly copy, in silk, pictures from magazines and calendars and various other sources. The end product might be a beautiful mountain vista, a classic Chinese building, or something as unscenic (though thoroughly functional) as the bridge over the Yangtze River in Nanjing. We visited also a silk weaving factory where we watched young women both learning and practicing their craft. As I watched sashes for Japanese kimonos being woven, I learned that complete designs had been sent from Japan and the factory was simply weaving to order. Needless to say, this factory and the embroidery factory were State industries.

Suzhou is the home of much that is traditional. We visited Tiger Hill, with its pagoda which has been standing since 961 A.D. Tiger Hill, which now serves as a public park, was crowded with school children and adults on a holiday. We climbed all the way to the top where we were treated to a spectacular view of the countryside as well as a brief history of the pagoda. The pagoda itself is being restored, as are many of the ancient sites in China. One of my surprises, in fact, was to see what interest the State is taking in preserving what remains of traditional Chinese structures. "What remains" is a phrase used advisedly. Years of rapid and sometimes violent social change capped off by a decade of cultural revolution have taken a heavy toll. Now that is in the past and preservation seems the order of the day. We visited only two of Suzhou's many gardens, the Fisherman's Garden and the Tarrying Garden, but they were quietly beautiful. Because the gardens are not visible from the adjacent streets, pedestrians might pass within feet without knowing that behind a wall or through a gate lies an ancient oasis of beauty and quiet. In the gardens one is impressed with the use of rocks, plants, and water to create the feeling of peace and the illusion of space. Professor Spector informed us that the Japanese had gotten their gardening ideas from China and, in effect, simply refined and distilled the Chinese garden into the more familiar Japanese garden.

Before leaving Suzhou, we also visited an ancient Buddhist temple—the Temple of 500 Buddhas. I suspect no one actually counted, but we discovered row after row of golden Buddha images—each with a different expression on its face. I gathered that a few elderly Chinese are still practicing Buddhists, but that the temple is largely an interesting relic of China's past.

The evening of July 18, after a very full day in Suzhou, we took a train to Wuxi (Wushi), where we would spend the next three days. By then, it is fair to say, we were all tired, and mostly just wanted the day to come to an end. By 10:00 we had arrived in Wuxi and been bused to our hotel on the outskirts of town. The hotel was less than a year old and rather Western; obviously built for the tourists. It was clean and not uncomfortable, but had been designed by unimaginative architects and built in great haste. In the morning we had a Western breakfast; it seemed so pallid in comparison with the Chinese breakfasts we had been having that we switched back the next day and for the rest of the trip.

Wuxi was for many of us the scenic highpoint of the trip. Our hotel, situated on Li Lake, was not far from Tai Lake. The lakes were surrounded by mist-shrouded hills and occasional vessels with traditional shapes and sails plied the water. Quiet, restful, beautiful were all words that came to mind. It was no surprise that our hotel in Wuxi had visitors from many countries, including Mexico, Japan, France, and Germany. Because of the lakes, the rich soil, and the moderate climate, this section of China is known as the land of fish and rice—the Asian equivalent of the Midwestern breadbasket.

As in Suzhou, we visited handicraft factories (clay figurines are made here), temples, and gardens. My notes from one morning's shopping in the local main department store reflect that socks in American sizes are hard to find, that a radio for sale...
China Markers

Students studying at Jiaotong University.

A student examination recital at Shanghai Teachers College.

Military training at Shanghai Teachers College.
was tradenamed "Spring Thunder," and that an English-alphabet typewriter for sale was called the "Flying Fish." Old-style treadle sewing machines are still being sold (new) in the shops, and the business counters have abacuses and slide rules, but no calculators.

To the consternation of some (and the interest of others), our stay in Wuxi included a visit to a local rehabilitation center or convalescent facility for workers with chronic problems. Dr. Lewis Thomas was perhaps the most interested member of the group, but his inquiries into diagnoses and therapies frequently ran aground on problems of interpretation. Yet we were interested in observing traditional Chinese treatments unpracticed in American hospitals. The facility itself, occupying several low buildings that blended into a hillside and overlooked Li Lake, provided a pleasant architectural contrast with the stark box of our hotel. The convalescent facility was clearly one of the local showplaces.

While there, we chanced across a current provincial newspaper and learned for the first time about the Cabinet shakeup at home.

The news items were, however, so brief and cryptic that our curiosity was aroused, not assuaged; in later evenings we listened to the Voice of America in an attempt to learn more. Many of our Chinese colleagues and several officials we met listen frequently to the English-language transmissions of the Voice of America—something that they would not have done, or certainly would not have admitted, three years ago. In this way, they stay informed and practice their English. Local radio and TV also carry daily English lessons.

AFTER THREE DAYS in Wuxi we took the train to Nanjing, an industrial city of some three million people on the Yangtze. It is not only an industrial city, but also an ancient political and cultural center and may soon be a sister city of St. Louis. In Nanjing we were treated first to a briefing about and tour of the famous four-mile bridge over the Yangtze. (Nanjing is more famous in China for its bridge than St. Louis is in the U.S. for its Arch.) Originally to be built with Soviet technical assistance, it was built in the end only by China, a point in which our hosts took considerable and understandable pride. The mausoleum of Sun Yat Sen is in Nanjing; it is spectacular. It lies midway up a steep pine-forested hill and is reached by climbing 392 increasingly steep steps. From the mausoleum, the view of the surrounding countryside is breathtaking. (I had no idea that the landscape of China was so full of beautiful views and vistas.) Inside the mausoleum there is a reclining marble likeness of Sun Yat Sen. The location of the actual remains is in some doubt, but there is speculation that they were taken to Taiwan when the Kuomintang was defeated in 1949. Nevertheless, it is clear that the mausoleum is a major national shrine.
China Markers

Professor Robert Boguslaw, sociology, exercises with a group at Wuxi Workers Sanatorium.

That elite U.S. fraternity of morning joggers finds a popular counterpart in T'ai Chi proponents. Professor McDowell ventures participation.

With good nature, WU travelers frequently joined in T'ai Chi exercises. Jane Thomas with an early, early morning street group.
Our stay in Nanjing included a visit to the house occupied by Zhou En-lai in 1947 during negotiations with the Kuomintang. The building is now both museum and national shrine. It was surprising to find in the garage a remarkably well-preserved 1946 Chrysler. We visited also the Nanjing historical museum, with its archaeological and anthropological exhibits and its not particularly subtle political messages concerning the class struggle through history.

At Nanjing University, also on our agenda, several of us discovered colleagues with mutual interests. The Dean of Arts and Sciences, Dr. Wang, was a geologist who enthusiastically examined reprints of articles from our Earth and Planetary Sciences Department. We had intended to take the materials on to Beijing, but it was clear that the Dean was loath to relinquish them. He suggested we could send other copies to Beijing.

High on the list of Nanjing events was a meeting with members of the Nanjing Revolutionary Committee (the equivalent of a city council) to explore the possibility of a St. Louis/Nanjing sister-city relationship. Well before our trip, Mayor James Conway had written the Mayor of Nanjing to suggest the idea and of a city council) to explore the possibility of a St. Louis/Nanjing partnership. We were received with interest and enthusiasm and were told that the proposal had been forwarded to the chairman of the Revolutionary Committee served as host at a delicious banquet for the whole delegation. While in Nanjing, we also were entertained at dinner by the Provincial Higher Education Bureau. Throughout, the hospitality, warmth, and generosity of our hosts was remarkable.

On July 24, we flew to Beijing. (We had debated taking a train for this trip in order to see the countryside, but that would have been a twenty-six hour journey, so we chose air transport.) In a few hours we were in the Beijing airport with its gate area overlooked by a huge portrait of Chairman Mao. After lunch at the airport restaurant and a stop at the Temple of Heaven (a major imperial shrine built in the fifteenth century), we arrived at the Beijing Hotel and were assigned rooms in the old section. (The Beijing Hotel has been likened to the Gaul of Roman times—divided into three parts. In the case of the hotel, these are a new part, a Russian-era part, and an old part.)

Our stay in Beijing started on July 25 with visits to the two major universities—Beijing University (where Vice President Mondale recently spoke) and Qinghua University. The former is devoted largely to arts and sciences, and the latter, like our sister university in Shanghai, to engineering. As the premier institutions in the national capital, Beijing and Qinghua are perhaps the most visible of China’s universities, but like their fellow institutions, they suffered greatly during the cultural revolution.

At both, we were welcomed with introductory descriptive briefings. I began to feel, however, that foreign visitors must be becoming rather a chore, if not an outright nuisance. On one hand, I am sure, our Chinese colleagues welcome the chance to visit with foreign scholars and to exchange materials and information. At the same time, a constant stream of visitors (and that is what Chinese scholars are beginning to experience) must inevitably be a bit wearing. Indeed, one can imagine that on some days Chinese faculty members find time for nothing but greeting visiting firemen. It is perhaps illustrative that all the universities have divisions of foreign service devoted wholly to problems associated with the logistic and linguistic problems of foreign guests and friends. (Mrs. Wang and Mrs. Yang—the deputy director of Jiaotong’s division of foreign service and an English instructor, respectively—traveled with our delegation throughout China. They were at the airport in Shanghai to greet us on July 7 and at the airport in Beijing July 30 to see us off.)

For all the drain on their time and energy, our Chinese colleagues not only made every effort to make us feel welcome, they also were quick to invite us to meet informally with them in seminars and to lecture to both faculty and students. Throughout our stay in Beijing, one or another member of the delegation was going off to meet a colleague, talk with a department, or visit a facility.

Beijing is clearly the first city of China. A large city, with six million inhabitants, it contains much of both contemporary and historic interest. Chairman Mao’s mausoleum is there, as are the Forbidden City, and the Great Wall. We visited them all. The mausoleum, in Tian An Men Square just a few minutes’ walk from our hotel, was at once a moving and a strange experience. As we approached, we were formed into ranks four abreast and the column of four moved toward the building. Groups of school children, overseas tourists, Chinese citizens, and national minorities all marched forward in a continuous column. Inside we divided into two columns to pass on either side of Mao’s bier—where his remains lay in state under thick sheets of transparent lucite. The mood is one of silent awe.

Across the square in the Beijing museum is a permanent exhibit depicting the life of Premier Zhou En-lai. At once moving and informative, the exhibit begins with his early life and days in Europe and ends with the clothing worn during his last illness. Along the way the observer views recent Chinese history—much of which Zhou helped to make. To the foreigner,
however, the exhibition is solely pictorial. Even though more and more foreign tourists are coming to China, all the captions and explanations remain written only in Chinese. Fortunately we had an interpreter. I could not help recalling the Chinese proverb “One picture is worth a thousand words” and thinking that a few words (in English) would have made each of the pictures worth more. Still, the exhibit left no doubt that Zhou was a statesman and national leader with extraordinary gifts.

In Beijing, we began to feel increasingly that time was growing short. July 30 was fast approaching and there was still much to do, with less and less slack in our schedule. So on the 27th, when we were scheduled to visit the Great Wall, we did, even though it was a windy, chilly, rainy day. On a clear day we could have seen the Wall stretching out into the distance. As it was, we saw a wall lost in mist—which prompted a romantic among us to say that you really haven’t seen the Great Wall until you’ve seen it through the clouds. Clouds or not, it was an impressive sight. Our trip there led through suburbs and flat agricultural land to rougher, mountainous, rocky terrain. The road became increasingly steep and winding, the vistas increasingly more dramatic. And then the Wall appeared—a monument to defense and to isolation through the centuries. Our bus parked, we climbed the Wall, we walked along its top for hundreds of yards. The mist was intermittent; winds blew the clouds away, then back. The experience could have been no more memorable had the sky been blue and the sun brightly shining.

AFTER THE WALL, practically anything would have been anticlimactic. And the Ming tomb certainly was. The Ding Ling Tomb has been excavated and restored, but still amounts to little more than an excavated void. Two museums on the grounds house gold, silver, and jade artifacts from the tomb, but those in the Palace Museum in Beijing are much more impressive. At Ding Ling Tomb, one has only the experience of walking down long flights of stairs to find empty chambers, and then climbing back up.

No one can visit Beijing without seeing the sector known as the Forbidden City, the Imperial Palace of the Ming and Ching dynasties. And no one leaves the Forbidden City without an increased understanding of China’s revolution. The Imperial Palace is an architecturally and artistically rich relic of a past era. The Palace Museum containing thousands of priceless objects, shows clearly the isolated opulence enjoyed by rulers in a country of mass poverty. No wonder imperial China fell.

The surprise was not only that the Forbidden City has been preserved, but that it is being restored constantly. And yet as I thought about it, it occurred to me that keeping a strong reminder of the causes of the revolution made sense. It may be that the restoration and preservation of historic buildings represents simply an interest in preserving the past for its own sake. It may be, too, a sensible way of soaking up surplus labor in public works. And yet I wonder. Restoring the Forbidden City may help to maintain the legitimacy of the present People’s Republic.

BEIJING was a place not only for sightseeing; it afforded also an opportunity for interesting conversation, for thinking, for reflection. The whole delegation met with the chairman of the University Council, Vice Premier Wang Zheng. I also met Professor Fei Xiaotong of the Institute of Social Science in the Chinese Academy of Science, and Hu Juewen, the deputy chairman of the Standing Committee of the National People’s Congress. In such conversations, and in others throughout the trip, I tried to understand where China is and where it is headed. In the end I came away hopeful, but not relaxed. The opening up we see now, the apparent liberalization, is not yet permanently fixed. It has by no means gone so far as to be irreversible. Many of the Chinese still see room for caution and think that personal commitment to change may be risky. In recent memory those who veered from the prevailing party line were sent to the countryside, or treated more harshly. Those who compromise ideological purity today may be tomorrow’s pariahs. If economic and social progress is not fast enough under the present posture, who can be sure this will not be reversed? I left hoping that the United States would do what it could to help keep China on its present course.

July 30 came too soon. I had packed the evening before so that I could spend my last day in China walking again to Tian An Men Square. I took the time to wander slowly through the Beijing History Museum studying its exhibits tracing the long course of Chinese civilization. Somehow that seemed a good way to spend my last few hours in China. Others went back to the Forbidden City; some simply walked. All of us tried in some way to soak up just a bit more of China. None of us knew when we would return there. Most of us wanted to. We were tired, but with the last day upon us, the end had come too soon.

We lounged in the hotel and in the afternoon left for the airport. Those who had been anxious about customs found that they could relax. With the aid of Mrs. Yang and Mrs. Wang, getting out was as easy as getting in. We turned in our last bit of Chinese currency. We said our last goodbyes to the Jiaotong interpreters, colleagues, and friends who had been with us for three weeks and by the middle of the afternoon we were walking to our plane. When we turned, we saw our colleagues waving to us from beneath those huge portraits.

In a few hours we were in Japan, and the next day most of us left for the United States, while others fanned out to various points in Asia. For us the China trip was over. None of us would forget it. As we boarded our plane, I recalled a phrase of Winston Churchill’s and wondered if this were only the end of the beginning.
Tour of the Nanjing Telecommunications Instruments factory.

Visit to a rare book room at Beijing University.
Last summer when the opportunity arose for Herb Weitman, director of University photographic services and adjunct professor of fine arts, to join a small University delegation that would be visiting China, we decided that a photo essay on China would be a major part of the fall Washington University Magazine.

Herb cautioned that there were several unknown factors which would influence the kind of photos he would ultimately take. Primary among these was the lack of a point of reference: how free or how restricted would a photographer be in China? Secondly, there were the obvious restrictions imposed by being a captive of group involvement and group movement. And overall was the fear—now common among all airline travelers—of film being exposed to damaging x-rays. He recalled a story of a contemporary travel photographer whose Russian film had been understandably exempted from regulation, taken away and treated specially by a customs official. To the photographer's horror, not a frame was printable.

Upon return, Herb reported that despite the necessary unity of the group and the difficulty of taking pictures from the back of the bus, all had gone very well. Under the care of the ubiquitous Mrs. Wang Yuan-chao of Jiaotong University, many difficult situations had been dismissed with the assurance, "Not to worry." In the following pages then, Herb Weitman’s photos of and observations on China.
After ten hectic, totally booked days in Shanghai—greeting, meeting, visiting, lecturing, listening—the sights and sounds of Wuxi and Lake Tai swept upon us gently and refreshingly. The resort area surrounding this large lake with its many islands attracts both Chinese national and international tourists. Its beauty and climate (cooler and less humid than the cities) offered a welcome respite.
The People's Park outside the Nanjing city gates reminded us of the universality of simple recreational pleasures. Like parks the world over, it contained a zoo, a children's playground, and a grand lake, where boats could be rented for a small fee.
Our hosts were anxious for us to note the progress represented by a new stone bridge being built to replace this bamboo structure. We were more intrigued with the original structure, which I ventured across only after seeing its frequent use by farmers carrying heavy loads on their shoulders or on their bicycles.
The Chinese use of social pressure as a form of gentle persuasion was frequently evident. Although school is not in session in July, groups of youngsters and teachers form the Young Pioneers, a special brigade which sometimes parades up main streets, symbolically sweeping with child-size brooms and buckets to remind elders to keep streets clean. We saw similar groups of elders—often preceded by clanging symbols—demonstrating neighborhood concern for cleanup and repair.
In China's teeming cities, only the very early morning hours are quiet and uncrowded. Even then, it is likely the cyclists were ringing their bells from force of habit. The noise of the streets builds slowly, reaching the level of a constant din which continues through the day and dies very slowly as night falls.
Although Chinese cities house urban populations of staggering numbers, the country's population remains largely rural. In the countryside, the commune represents the lowest level of formal state power. Its members are organized into brigades and production teams to deliver the necessary internal services and to produce both agricultural and light industrial goods for external sale. The commune which we visited was made up of 30,000 members living in 7500 households.
Shanghai: The strongest impression of China is one of population density. Stop on a street and you are immediately surrounded six deep by a curious, silent crowd peering at you and looking over your shoulder. Yet despite the crowds, there is no pushing, no shoving, little physical contact, for the people seem to maintain a certain dignity and decorum unknown in Western cities.
The Yangtze River Bridge in Nanjing has become a symbol of Chinese independence and progress, as well as a transport link of great economic importance. Originally to be built with Russian assistance, the bridge was finally engineered and constructed entirely by the Chinese. As many as 50,000 workers and volunteers spent eight years completing four miles of approaches and the bridge itself. Now 160 trains a day use the lower span, replacing ferryboats.
In a land where all motor vehicles are state owned, the Chinese use bicycles as the principal mode of private transportation. They move individuals and their children, products, household goods, foodstuff, anything; empty spaces near shopping avenues become bicycle parking lots. Buses, always crowded, are also much in evidence.
Tai Chi seems to be the major form of physical exercise for the urban Chinese. Early every morning thousands participate. Everywhere also, the Chinese show great love of and pride in their children. A major government effort to hold down population has resulted in mounting social pressures to limit family size to one child, making that child even more precious to its parents and grandparents.
The structure of the family seems to remain very strong. Wherever there is leisure, there are multi-generational family groups. Great respect continues to be paid the aged; great fondness is lavished on the children.
In the evenings, even throughout the day for some groups, the street becomes the community area for social exchange. Here dress is even more informal than the light-colored cotton shirt of standard cut and dark cotton trousers that are unofficially the unisex uniform for the working day.
The Wall: even though you know much about the Wall long before your arrival, when you see it, experience it, walk upon it, there comes a rare sense of awe and exhilaration. It is one of the great wonders of the world. Although the wall originally stretched 22 feet high, 20 feet wide, and more than 3000 miles long, only a small section outside Beijing has been restored.
Faces from the Huishan Clay Figure Workshop in Wuxi, representing a craft that has been carried on continuously for 400 years, remind you that despite current efforts for modernization, China remains largely traditional. While we may seem to understand each other, there is such a difference in lifestyle, we truly cannot. Yet we find that we often laugh at the same jokes, and usually the commonness of our emotional responses seems to bridge the cultural gap. On a person-to-person basis, relationships do happen.
organized by Jean Pennington of the School of Continuing Education under the title "The Arts, the Humanities, and the Sciences" has been the core of this kind of adult inquiry for the past decade. Many faculty members participate regularly despite the small stipend offered for their effort. "I often approach faculty members asking if they do not have some idea rattling around in their head which they would like to test on a cross section of people," said Pennington, explaining how the courses take shape. "What I offer them in exchange for their participation and preparation is a group of students who bring to the classroom intelligence and experience."

Similarly, Washington University long ago began concentrating its efforts on crossing traditional disciplinary boundaries. The result has been a relatively large number of programs which allow the University's full-time graduate and undergraduate students a freedom from stereotyped specialization unheard of on hundreds of other campuses.

The University's program in comparative literature, for example, has no departmental status, a small number of dedicated faculty of its own, one determined administrator—Chairman William Matheson, and hundreds of loyal undergraduate and graduate students. Its faculty is drawn from a dozen different disciplines; the courses of study pursued by its students are unique; their work is evaluated by a committee of faculty members from the disciplines represented. Its quality is attested to by the continued enthusiasm of the evaluators.

The University's new Master of Liberal Arts degree is set within this carefully cultivated atmosphere of interdisciplinary study and against the background of thoughtful, stimulating programming for the adult student. The program is carefully balanced between freedom and authority. "It is," said Robert Williams, professor of history and M.L.A. director, "unlike any other M.L.A. of which we know. It is designed to respond to the personal and academic needs of the highly motivated college-educated adult.

"With this program we are reestablishing the master's degree as a terminal degree useful in itself. Sometime in the '60s, when money was more available, the master's degree became simply a way station to the road to the Ph.D. In addition, we are attempting to give the study of the liberal arts real intellectual coherence, to affirm its significance and value in today's world."

M.L.A. study will be centered on four core colloquia required of all candidates. Generic topics of the colloquia are 1) ideas and inquiry, 2) the creative imaginator, 3) science and human values, and 4) historical understanding. The exact courses to be offered each semester as colloquia will be individually tailored. Each is to be taught by faculty from at least two disciplines. The initial offerings are being taught by the four faculty members who make up the M.L.A. committee: Thomas Hall, emeritus professor of biology and the history of science; Gerald Izenberg, associate professor of history; Wayne Fields, associate professor of English; and Robert Williams, professor of history. Hall and Izenberg will teach a Colloquium 1 course entitled The Biological and Historical Foundations of Individualism; Fields and Williams will teach a Colloquium 2 course entitled The Creative Imagination/Brave New Worlds: Russia, America, and the Literary Imagination. Colloquia class size will be limited to fifteen.

"Beyond the basic twelve hours of colloquia requirements, we expect our students to put together their own programs, ranging across all courses offered by the Graduate School of Arts and Sciences," said Williams. "By its nature, that probably means that most programs will be weighted toward the humanities, but it is not unlikely that some students will complete their degrees with heavy concentrations in the sciences, the political sciences, or the social sciences."

Nationally, M.L.A. programs are cited as milestones in the movement to reestablish the liberal arts in the university curriculum. Here the program reaffirms, it cannot reestablish. At Washington University the concept of liberal education as an essential element of higher education has never lost its place, or even its luster. D.W.