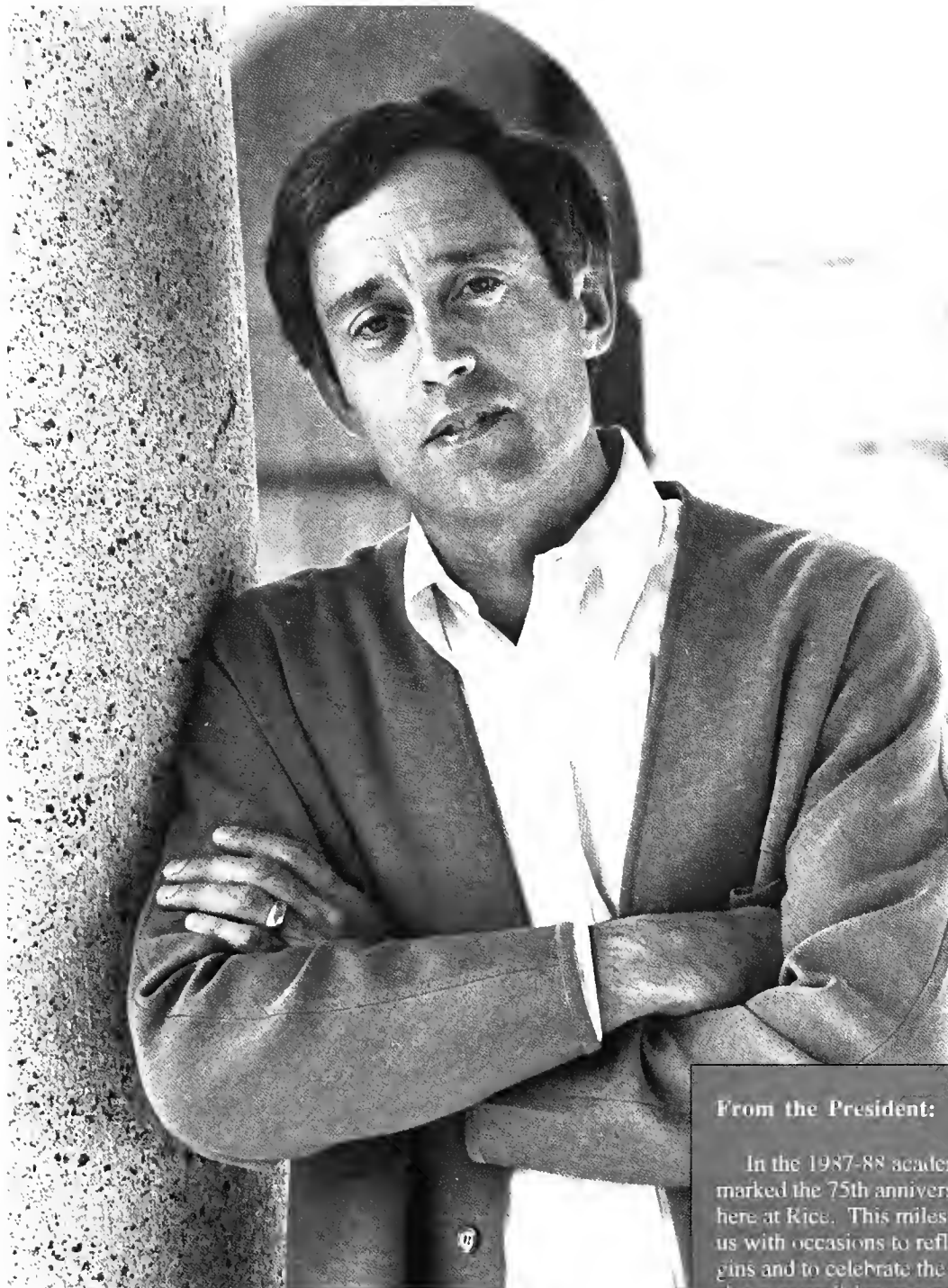


Report of
the President

Rice
University
1988



From the President:

In the 1987-88 academic year we marked the 75th anniversary of classes here at Rice. This milestone provided us with occasions to reflect on our origins and to celebrate the very impressive accomplishments realized over those years. But there is something about three quarters of a century that invites looking forward as well as back. Accordingly, in this report I will attempt to describe how the wonderful traditions of this institution are shaping our responses to challenges that will increasingly confront us in the quarter-century ahead.

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The Foundation in Place

The foundation of this university is as solid as it is in significant measure because of the substantial endowment that undergirds it. This endowment, of course, derives from the generosity and vision of the founder himself. But it is the result as well of further contributions from many others over the past 75 years and also of the careful stewardship that in turn has fostered its growth.

Beyond—or built upon—this base of financial viability have been two further points of orientation. One I can summarize most succinctly in Edgar Odell Lovett's phrase, "liberal and technical learning." The other is evident, for example, in Julian Huxley's conception of Rice, which he expressed

in the first years of the university and which has been insisted on ever since, as a place where a single faculty is devoted both to teaching and to research.

That liberal and technical learning are just about evenly balanced in terms of numbers of student majors and faculty members distinguishes Rice from such schools as M.I.T. and Cal Tech. Rice has always had the collective vision to be what our name only later became: a university. For sound historical reasons that took into account the most pressing needs of this region, Rice did focus initially on the sciences and engineering. But from the beginning, this institution also proclaimed devotion to letters and art. Over the years, the sciences and engineering have continued to be areas of strength. But we have also cultivated letters and the arts, including

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architecture and music—and, more recently, also the social sciences, including administration.

Similarly, we have from the beginning insisted that faculty members not only teach but also conduct research. In this connection the role of graduate students even in the early years has been significant. Graduate students were not deployed in any formal capacity to teach undergraduates. That was clearly and unambiguously the task of the faculty. Yet from the beginning, leaders of the institution, including in particular Edgar Odell Lovett, have also recognized the great educational potential of encouraging interaction between graduate and undergraduate students.

Here, Julian Huxley's orientation is again instructive. Shortly after he joined the Rice faculty in 1912, Huxley brought from London a student to serve as his lab assistant, Joseph Davies by name. Davies combined his lab duties with further study and eventually received his Ph.D. at Rice. In 1929, he joined the faculty and for many years thereafter chaired the biology department. In short, Davies exemplifies a pattern of contributions to research and teaching appropriate to the various stages in the progression from graduate student to beginning faculty member to senior professor. That pattern is the norm here: interaction among learners, including undergraduate with graduate students, but with central responsibility for instruction at all levels assigned to the faculty.

These then are the foundations on which we are building: substantial financial support that undergirds our efforts; a university in the full sense of the word, devoted to liberal as well as technical learning in letters, science, and art; and a unitary faculty committed to teaching and research with both undergraduate and graduate students.

Building Now Under Way

To embody visions of Rice first dreamed of many years ago, we must build on the solid foundations which our forebears established. In particular we must develop further our identity as a university whose focus on undergraduate education also includes serious research and scholarship across the areas of letters, science, and art. We must, in

short, continue to integrate two types of institutions that for the most part have gone their separate ways in American higher education: the liberal arts college and the major research university.

We all have our models of outstanding liberal arts colleges. On my list are such places as Swarthmore in Pennsylvania, Amherst in Massachusetts, and Carleton in Minnesota. There is a less well-developed tradition of distinguished liberal arts colleges on the West Coast. But Pomona in California fits the pattern. What such liberal arts colleges have in common is an unambiguous focus on undergraduate education in the arts and sciences. To be sure, faculty at such colleges are often distinguished scholars, particularly in the humanities. But the overall institutional emphasis remains on undergraduate education, and in areas like the sciences and engineering the resources for major research efforts are simply not available.

While any two of us might have somewhat different examples of outstanding liberal arts colleges, we would, I expect, have little difficulty in agreeing on a short list of major research universities. The list would certainly include such places as Harvard, the University of Chicago, and the University of California at Berkeley. These universities also educate undergraduates. But over the years more and more emphasis has been placed on graduate education and research.

What distinguishes Rice from virtually all of the 3,000 other colleges and universities in the country is that we are committed to embodying both kinds of institutions—the liberal arts college and the major research university. Our aim is not a compromise between the two: combining features of liberal arts education with some concern for research and scholarship. Instead, we intend to be both kinds of institutions in full strength and in ways that allow the two identities to mutually reinforce and strengthen one another.

We are not alone in this intention. Other universities share similar aspirations. But I am convinced that the number of institutions seriously engaged in sustaining this double identity can be counted on the fingers of one hand. Of those universities that

historically have had this double commitment, the pressures of high-power research have increasingly moved faculty members away from intimate involvement in undergraduate education. In this respect, the role of graduate teaching assistants in the instruction of undergraduates is a significant index of the extent to which the model of the liberal arts college has—or has not—continued to shape our major universities. Conversely, those institutions that have continued to focus on undergraduate education almost invariably have neither the traditions nor the resources for participation in major research projects.

It is crucial that we continue to nurture our distinctive identity as both a liberal arts college and a major research university. To do so we must continue to focus on the education of undergraduates. In particular, it is imperative that we continue to attract outstanding undergraduate students and to involve faculty members directly and centrally in their education—not only in formal course work, but also in personal advising or counseling and in the social and cultural life of the colleges.

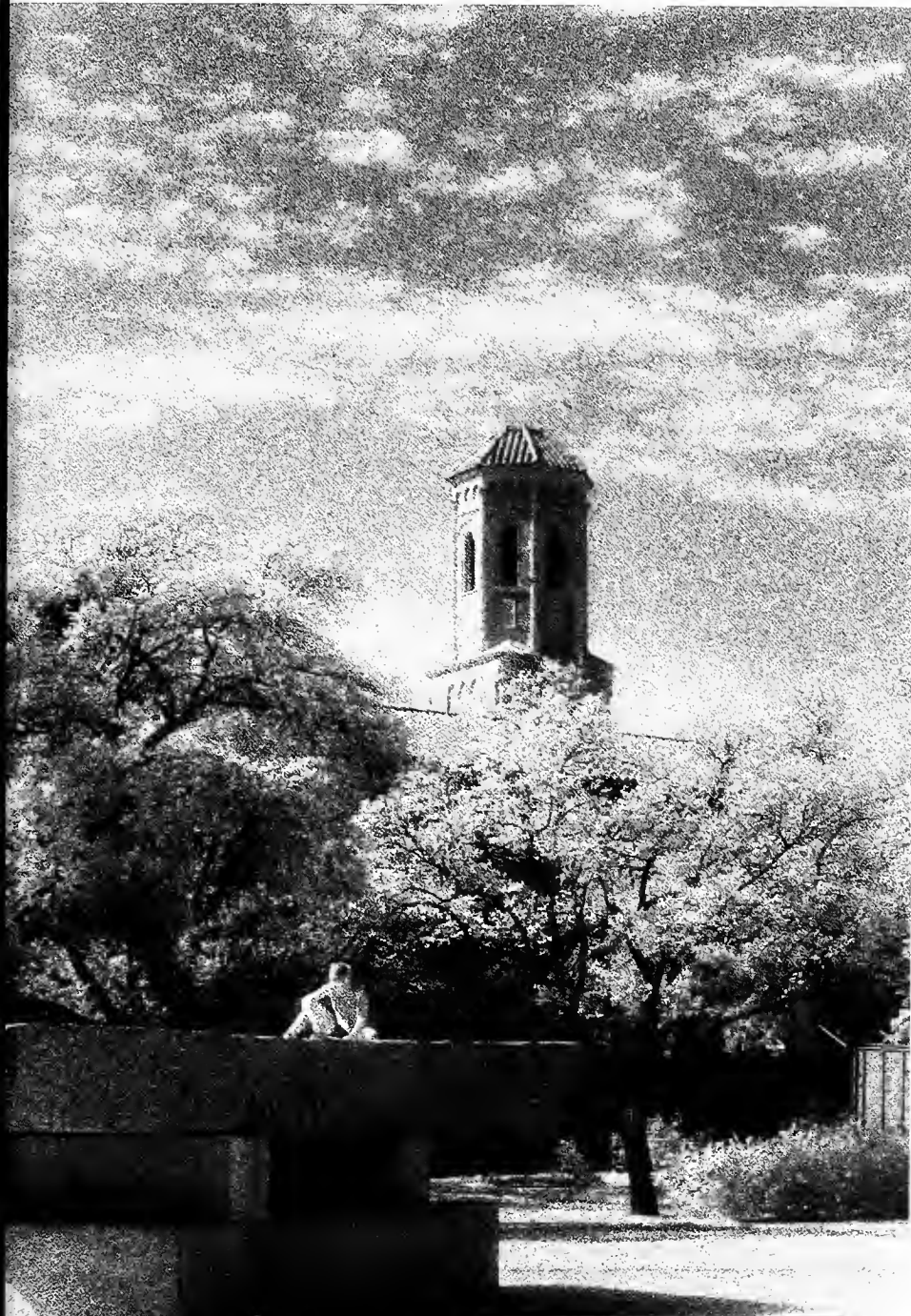
At the same time, if we are to continue to offer the unsurpassed education to which Rice undergraduates have become accustomed, we must be able to attract faculty members as outstanding as the best that have been appointed in the past. To do that, we have to be able to say to prospective faculty members, "If you come to Rice, you will have the opportunity to teach outstanding undergraduates in refreshingly small numbers, and we will require you to do that. But you will also have a critical mass of colleagues and adequate facilities and such collateral resources as library collections and equipment to allow you to be at the cutting edge of your own research and scholarship and professional accomplishment." Unless we are able to be persuasive on both points, we will not succeed in continuing to recruit the best faculty members. And if we fail there, over time we will also no longer be able to attract the best students. In sum, we in this institution, with our special traditions, will be able to offer an undergraduate education un-

surpassed anywhere, including in liberal arts colleges, only if we also realize our identity as a major university, with distinguished programs of research, scholarship, and professional accomplishment.

In developing our double identity as both liberal arts college and major research university, we must resist the temptation to imitate other larger and better-known institutions. Put positively, we must think through and implement a strategy in which we target areas of distinctive strength, opportunities in which our relatively small scale is an asset. To identify such targets of opportunity, or ecological niches, is the process in which we have invested substantial energy and considerable resources over the past three years. I will not rehearse that entire process now. But I do want to emphasize that the intention informing our deliberations and actions has been to select areas in which to build distinctive strength rather than simply to imitate other institutions. That means building on collaborative efforts more readily achieved here because our relatively small scale in principle—though in the past not often enough in practice—allows interaction across lines that have become virtual chasms in larger and more differentiated institutions.

In my annual report for last year, I described the five institutes and centers that we have identified in our enhancement program. Each of those institutes and centers illustrates patterns of research and scholarship that cut across traditional disciplinary divisions. Those centers and institutes are enlisting the participation of many of our most vital faculty members. I am excited about that development. But I will not repeat the descriptions provided in last year's report. Instead, I will draw on our emerging experience with our new centers and institutes to illustrate what I take to be two major challenges confronting this and other universities in the next quarter-century. The first of those challenges entails the complex of issues compressed into the current buzzword, "competitiveness." This set of issues is in turn related to the second challenge I will outline, namely the process of internationalization of cul-





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ture, and therefore also of education, that is already well under way and will gain further momentum in the coming quarter-century.

Competitiveness

The theme of competitiveness and such closely related preoccupations as technology transfer call attention to potent pressures on universities to produce research that is more and more applied, that promises economic benefits in relatively short order, that will support, or even initiate, a resurgence of American capacity to capture market share. Even such bastions of so-called pure or fundamental research as the National Science Foundation exemplify this tendency. Certainly, the NSF-sponsored Engineering Research Centers and its Science and Technology Centers illustrate the pattern of efforts to accelerate the movement from discovery to application.

One of our most distinguished alumni, Roland Schmitt, expresses this intention forcefully. In a 1985 address, delivered in his capacity as Chair of the National Science Board, he summed up the thinking behind the new NSF initiatives:

I believe that the main way in which engineering research education can contribute to the international competitive position of the United States is by bridging and shortening the gap between the generation of knowledge and its application in the marketplace. ("Engineering Research and International Competitiveness" in The New Engineering Research Centers, Washington: National Academy Press, 1986, p. 19.)

It is not, Schmitt argues, the generation of basic scientific knowledge that is the problem. The Japanese tacitly admit American strength in this area by investing 2.5 times as much money for university and non-profit research laboratories outside Japan—mainly in the U.S.—as they spend in their own country. Instead, the problem is the

length of time it takes us to transfer new scientific knowledge to commercial application. It is to meet this competitive challenge that Schmitt calls for new initiatives like the Engineering Research Centers to bridge gaps between universities and industry, between technical development and marketing within industry, and among the various engineering disciplines themselves.

Rice's three institutes in the sciences and engineering engage precisely the issues on which Schmitt and recent National Science Foundation initiatives focus. The clusters cut across conventional disciplinary lines, including in two cases the even larger division between science and engineering. The Rice Quantum Institute draws its fellows from the departments of space physics and astronomy, physics, chemistry, electrical and computer engineering, and mechanical engineering and materials science. The Institute of Biosciences and Bioengineering includes members from biology, biochemistry, chemistry, chemical engineering, and environmental science and engineering. The Computer and Information Technology Institute elicits collaboration from computer science, mathematical sciences, and computer and electrical engineering.

In each institute, we are also working to establish solid relationships with industrial sponsors. In some cases, the connection between fundamental research and development of marketable products is quite direct. The most dramatic example of this direct university/industry connection is the research of George Schroepfer and his colleagues on compounds that affect the levels of cholesterol in blood. But other researchers also have very substantial interaction with industrial sponsors. Ken Kennedy with I.B.M., Riki Kobayashi with the Gas Research Institute, John Dennis with Shell Development, and Angelo Miele with Boeing are examples. Even more closely related to corporate sponsors are the numerous specific projects undertaken for industry through REDDI, the Rice Engineering Design and Development Institute, over the past ten years.

In the years and decades ahead, we will need to continue to nurture research that cuts across traditional disciplinary



One of the great attractions of our multidisciplinary institutes and centers is that they allow us to build a critical mass of colleagues for research and scholarship while still providing faculty appointed to offer a balanced educational curriculum.



and departmental lines and to maintain solid working relationships with industrial partners. At the same time, we should resist pressures toward interdisciplinary research and collaboration with industry that deflect us from our central institutional purposes. Navigating in and through those crosscurrents will be a critical assignment for all of us in the next quarter-century.

In the case of multidisciplinary research and scholarship, the assignment is critical precisely because such research offers the prospect of a comparative advantage to an institution small in scale like Rice. As a result, we may be so tempted to focus on this comparative advantage that we in effect undermine the base on which the collaboration rests. Where multidisciplinary investigation has worked well here and elsewhere, it has drawn together researchers who bring solid grounding and rigorous competence in their own disciplines to collaborate with colleagues similarly grounded in other fields. In short, successful interdisciplinary collaboration presupposes well-developed achievements within the several disciplines.

This fact about collaborative research becomes all the more compelling when viewed in the context of university education in general and of this university in particular. One of the great attractions of our multidisciplinary institutes and centers is that they allow us to build a critical mass of colleagues for research and scholarship while still providing faculty appointed to offer a balanced educational curriculum. This attraction becomes compelling when we consider the often disconcerting effects of premature interdisciplinarity. Student or faculty learners cannot contribute effectively to multidisciplinary investigations if they are, to put it perhaps too cutely, undisciplined. It is, therefore, crucial that we continue to offer a balanced curriculum not only for the benefit of undergraduate education, but also for the long-term viability of even the most emphatic multidisciplinary research.

In organizing our centers and institutes, we have the tension between disciplinary competence and multidisciplinary investigation very much in mind. We all know of too many exam-

ples of research centers or institutes—at other universities, of course—which have spun off totally into their own orbits with only the most tangential connection to departments or to any but the most specialized students. To counter this strong centrifugal force, we are insisting that all members of our centers and institutes be appointed to regular departments, in which they share teaching and other duties with departmental colleagues. We are developing memoranda of understanding with each of the centers or institutes to establish patterns that integrate their investigations with the overall academic administration of the university. It will come as no surprise that in this process of negotiation, institute directors seek to have more authority and resources under their direct control while department chairs and deans stress the need for integration into overall planning and budgeting. But the fact that the respective positions are quite predictable makes the process no less interesting—and no less crucial for the identity of this university in the years ahead.

As with multidisciplinary collaboration, so in relationships between universities and industry, bridging gaps is neither a simple nor an easy assignment. Here again Schmitt is instructive. Even as he emphatically calls for bridging the gap between universities and industry—between generating knowledge and applying it in the marketplace—he also warns against construing universities as little more than “job shops for industry.”

The experience of the Rice Quantum Institute is illuminating on this issue. Certainly the investigations of R.Q.I. researchers bear on a host of practical and, in the long run, even commercially applicable concerns. The development of new materials or of more efficient catalytic agents are examples. But it is even more emphatically the case that R.Q.I. focuses on fundamental research, on understanding at the most basic level of atomic structure. Those of us who have the pleasure of listening to Rick Smalley talk about the new carbon cluster, buckminsterfullerene, that he

and his colleagues have discerned and described, have a glimmer of the delight of discovery that animates the investigations under way in R.Q.I. That delight in discovery—at least in the first instance independent of questions of marketable applications—is what distinguishes intellectual inquiry at this and other leading universities. It is, accordingly, crucial to our very identity as a research university that we resist pressures to become preoccupied with short-term economic payoffs at the cost of the disciplined, long-term, fundamental inquiry that constitutes our irreplaceable contribution.

Unwillingness to resist pressures toward preoccupation with short-term payoffs endangers not only research but also education. I have suggested that failure to restrain the centrifugal tendency of interdisciplinary research centers undermines not only the overall integration of the university as a community of inquiry but also the quite specific disciplinary instruction of students. Similarly, preoccupation with the short-term economic payoffs of research has a counterpart in educational programs that are excessively concerned with practical preparation for employment.

This university, like all other leading universities, has a proud tradition of resisting this careerist or vocational conception of education. Even in our professional programs, we have insisted on a broad general education as the required complement to specialized competence. We will need to continue to press against the tendency to focus all but exclusively on a central area of interest. The tensions here are endemic to the enterprise, especially in such programs as engineering, architecture, and music. But just as in our research we must not become, in effect, a job shop for industry, so in our education we must always insist that we are more than simply a training school that turns out competent professionals.

In sum, even as we develop further our collaboration with business and industry, we must preserve what defines our distinctive contribution to that collaboration. The contribution certainly includes research that promises economic benefits and education that prepares our graduates superbly to pursue distinguished careers. But this con-

tribution measured in such quantifiable societal terms will be maximized only if we also nurture our double identity as both a liberal arts college committed to unsurpassed undergraduate education intentionally distinguished from training, and a research university devoted to fundamental discovery as well as application.

Internationalization

A second challenge confronting Rice and other universities in the next quarter-century is that of responding to increased and still-increasing interaction among cultures and the correlative internationalization of education. For us at Rice, perhaps the feature that most defines our response is once again our relatively small scale. That scale is definitive in the literal sense: it quite sharply limits the range of options available to us. To take the most obvious instance, it rules out developing a specialized competence in many of the particular cultural traditions that increasingly influence us all. Of course, no university can have specialized competence in all of the traditions that would be represented in a truly global institution. In that sense, all universities are unavoidably provincial. But even a cursory comparison of Rice with institutions like Harvard or the University of California at Berkeley demonstrates that our relatively small scale has costs in terms of coverage and depth in the study of particular cultural traditions.

Accordingly, we must take all the more care in our response to the challenge of internationalization. We will never assemble the specialized competence in Chinese and Japanese studies represented in the Fairbank Center, the Yenching Institute, and the Department of East Asian Languages and Civilizations at Harvard. Nor will we ever rival the resources the University of California at Berkeley has invested in Persian or Tibetan or Korean language studies. But with care we can develop strength precisely where such specialized programs are characteristically weak: we can focus our attention on comparative questions all too readily ignored or avoided by specialists with many colleagues also specializing in the same tradition.

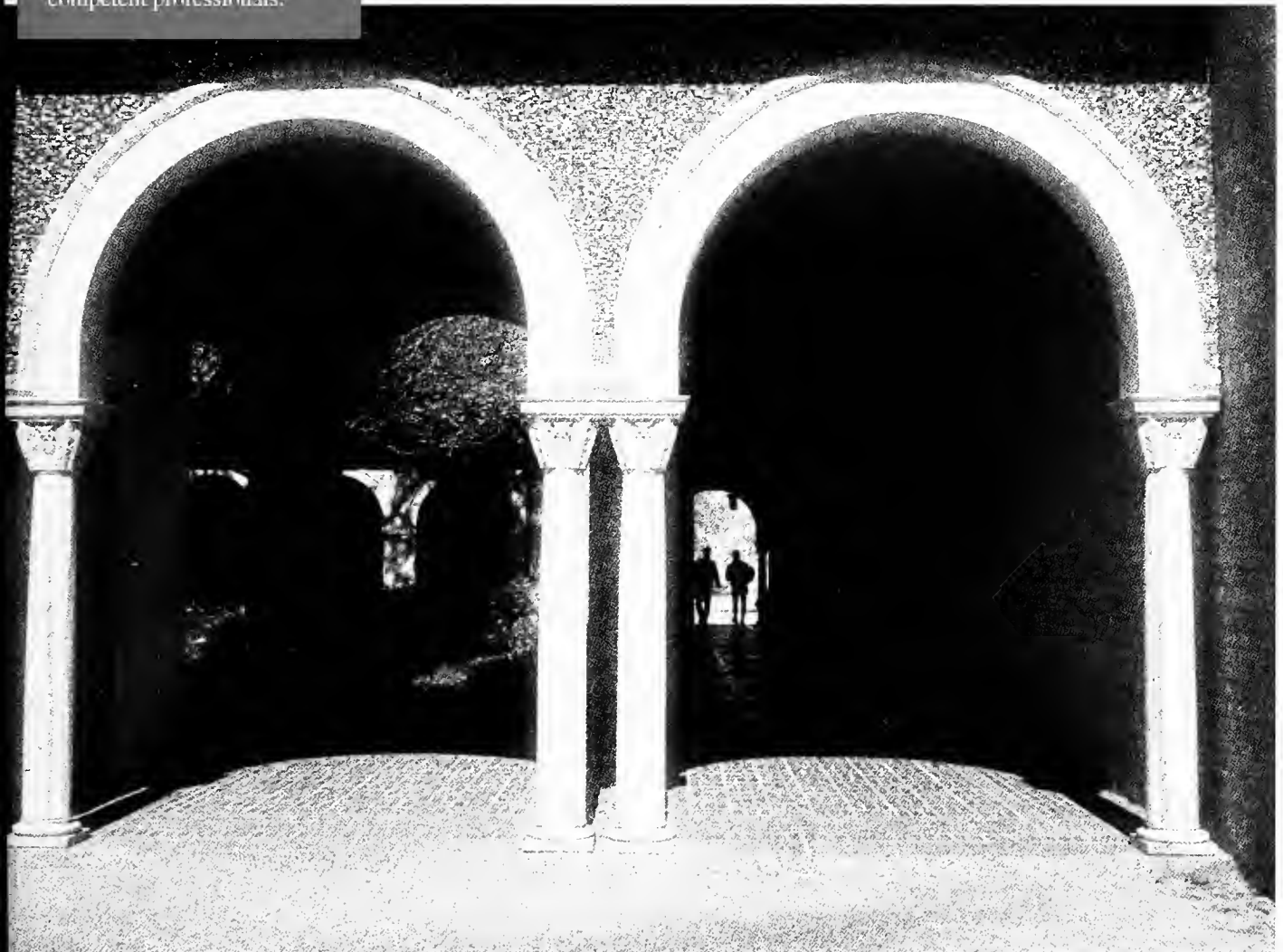


Maximizing our advantage of relatively small scale is the strategy underlying our development of both the Center for the Study of Institutions and Values and the Center for Cultural Studies. In the case of the Center for the Study of Institutions and Values the emphasis is on collaboration among multiple disciplines, all devoted to understanding social processes. Investigations that are international and comparative are certainly not excluded, though they are not the focus of attention. But consideration of just this comparative dimension is what the Center for Cultural Studies invites and in the end demands. Interpreting word or action, text or institution in one cultural setting becomes immediately more complex and more sharply delineated

when placed in a comparative context.

The fact that Michael Fischer and others in our anthropology department are playing a leadership role in the Center for Cultural Studies is very important in this regard. Unlike most of the humanities and the social sciences as they have developed in Western universities, cultural anthropology has persistently directed attention to cultures other than our own. In principle, historians achieve the same effect in attending to periods other than the present; literary critics, in reading texts from a variety of contexts. But in practice, comparative questions come into sharpest focus from perspectives that include significant differences of place as well as time. Yet even in our major universities, philosophy departments have in

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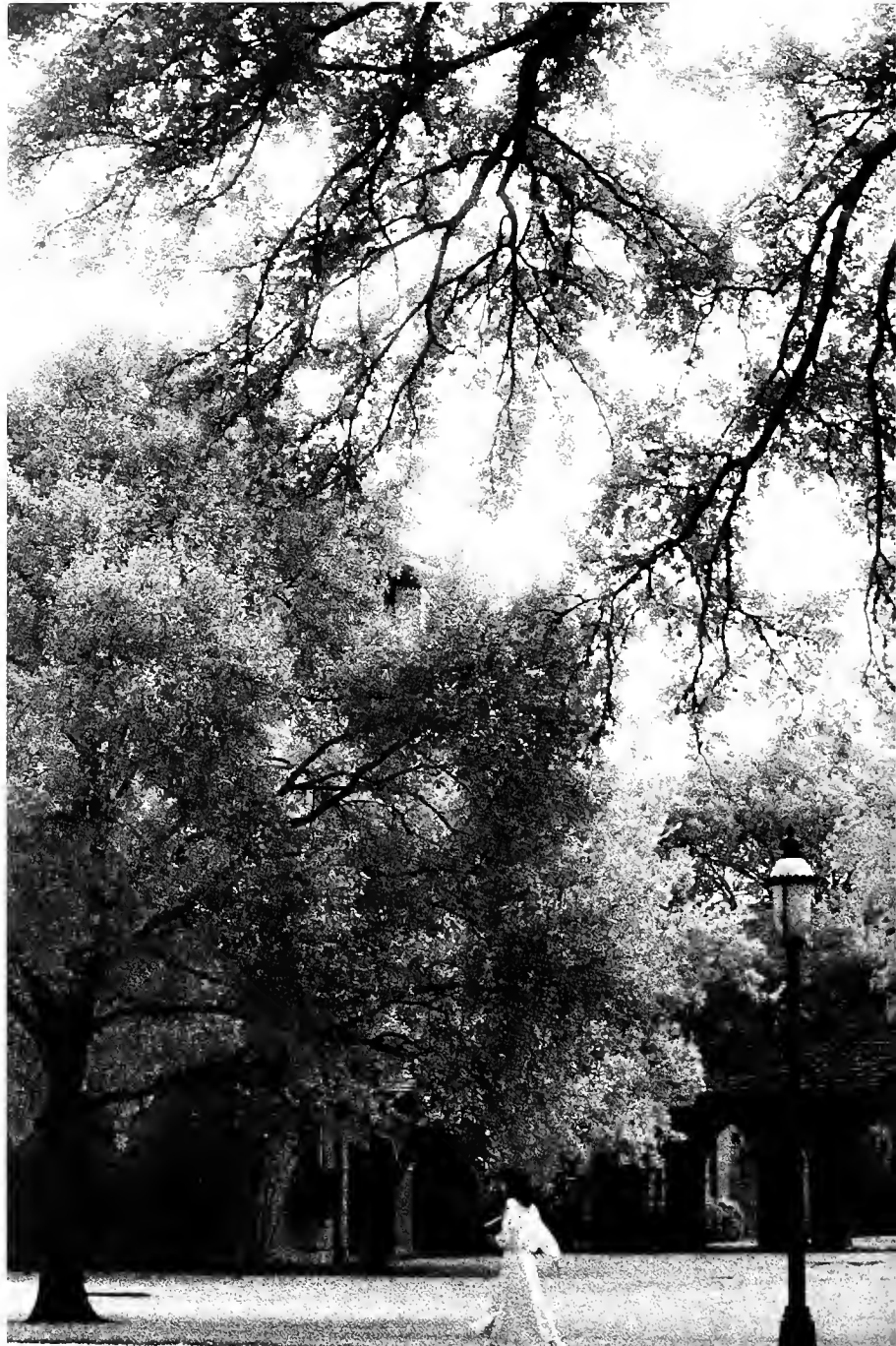
fact been departments of Western philosophy, history departments have been almost exclusively departments of European and American history, and economics and political science departments have studied almost only Western societies. Departments of anthropology and sociology and religion have been partial exceptions. But overall, the humanities and social sciences as taught and learned in our universities have been quite provincial.

Over the next generation, this university, like others, will become increasingly international in the scope of our teaching and scholarship. In our appointments we will not, however, attempt to compete with other larger, more differentiated universities in the depth of specialized competence in particular cultural traditions. Instead, as we strengthen existing departments we will consider how interaction among scholars with different specializations may increase our comparative understanding of social and cultural processes. In this way we will over time move beyond the provincialism of Western academic disciplines.

Signs of new patterns are already evident. In our English department, there is interest in a program in world literature, in which our other departments of language and literature would also participate. The history department is examining ways to enhance attention to Asian traditions, including Western Asia or the Middle East. Similarly, departments like anthropology, sociology, and religion are eager to strengthen the comparative dimension of their programs. We will also have to address our deficiencies in Latin American and African and, closer to home, Afro-American and Mexican-American traditions.

In all such efforts, we will have to exercise great care to concentrate our limited resources on appointments that strengthen the collaborative efforts of our centers. The centers are crucial if the whole is to be more than the sum of small and otherwise quite isolated and disparate parts. The centers must in effect generate the centripetal force required to counterbalance the centrifugal tendency of area specializations and their respective scholarly guilds.

This internationalization of both teaching and scholarship will over time



In the humanities, arts, and social sciences as well as in the natural sciences and engineering, we are developing an international community of scholars who collaborate in studying various human traditions.



also have its impact on personnel here, both student and faculty. Paradoxically, the fields least attentive to cultural differences are ahead of all other areas in this respect. The sciences and engineering are to a very impressive degree already international communities of inquiry. In some areas—take civil engineering as an example—advanced students are already predominantly from abroad, and faculty members include substantial representation not only from Europe but also from Asia. Indeed, across the spectrum of the sciences and engineering, there are very extensive international exchanges within a worldwide community of mutual respect.

In the humanities, arts, and social sciences, where cultural differences are much more salient as variables in the objects of study, the subjects undertaking the investigation are paradoxically much less an international community. Here, too, however, we are moving more and more toward collaboration across national boundaries, as it becomes clearer that the provincialisms of even the recent past are less and less tenable. Instead of accepting interpretations of personal, social, and cultural life developed more or less by observers from outside a culture, we will in the coming decades aim to understand that an adequate representation of the traditions under scrutiny is achieved only when it is shared and affirmed by insiders as well as outsiders. We will be able to aim at this high standard because in the humanities, arts, and social sciences as well as in the natural sciences and engineering, we are developing an international community of scholars who collaborate in studying various human traditions.

The result for this and other major universities worldwide will be an increasingly international community of teaching and learning. Faculty members grounded in other traditions will hold appointments here. Similarly, Rice faculty will increasingly study and teach at universities abroad—not only, as is already often the case now, in international meetings of natural scientists and engineers, but also in extended appointments in the humanities, arts, and social sciences. At the same time, increasing numbers of students from abroad, un-

dergraduates as well as graduate students, will enroll here, even as more and more Rice students spend a semester, a year, or (in the case especially of graduate students) even longer at universities abroad. In sum, while we continue to solidify our base in our immediate region, we will also build an increasingly varied national and international community here. Rice will as a result be at once both local and global, a community of inquiry that is both intimate in scale and inclusive in scope, ranging from a strong presence of Texas people and traditions to at least a modest representation of major communities from across the nation and around the world.

Alternative Futures

In discussing “competitiveness” and internationalization of education and research, I have selected two examples of challenges that confront Rice in the quarter-century ahead. I can, however, also pose the alternatives that Rice faces in more general terms. In closing, I will do that with reference to what I see as three options that stand before us.

The first option is in a sense the most seductive one. It is to move ahead aggressively so as to negotiate the transition that the University of Chicago and Stanford managed in the decades following the Second World War to become major research universities. This decision to imitate larger, more differentiated institutions would entail not only developing graduate programs in the arts and sciences that eventually would in all probability overshadow their undergraduate counterparts, but also establishing such graduate professional schools as law and medicine that also would distract attention from undergraduate education. This alternative would constitute a break with what I have described as the distinctive identity of this institution—a transition that other major universities have made, though viewing it as a further development rather than a break with their traditions. To put my position sharply, this option would in my view be a prescription for disaster, diffusing our re-



sources rather than building on our established strengths.

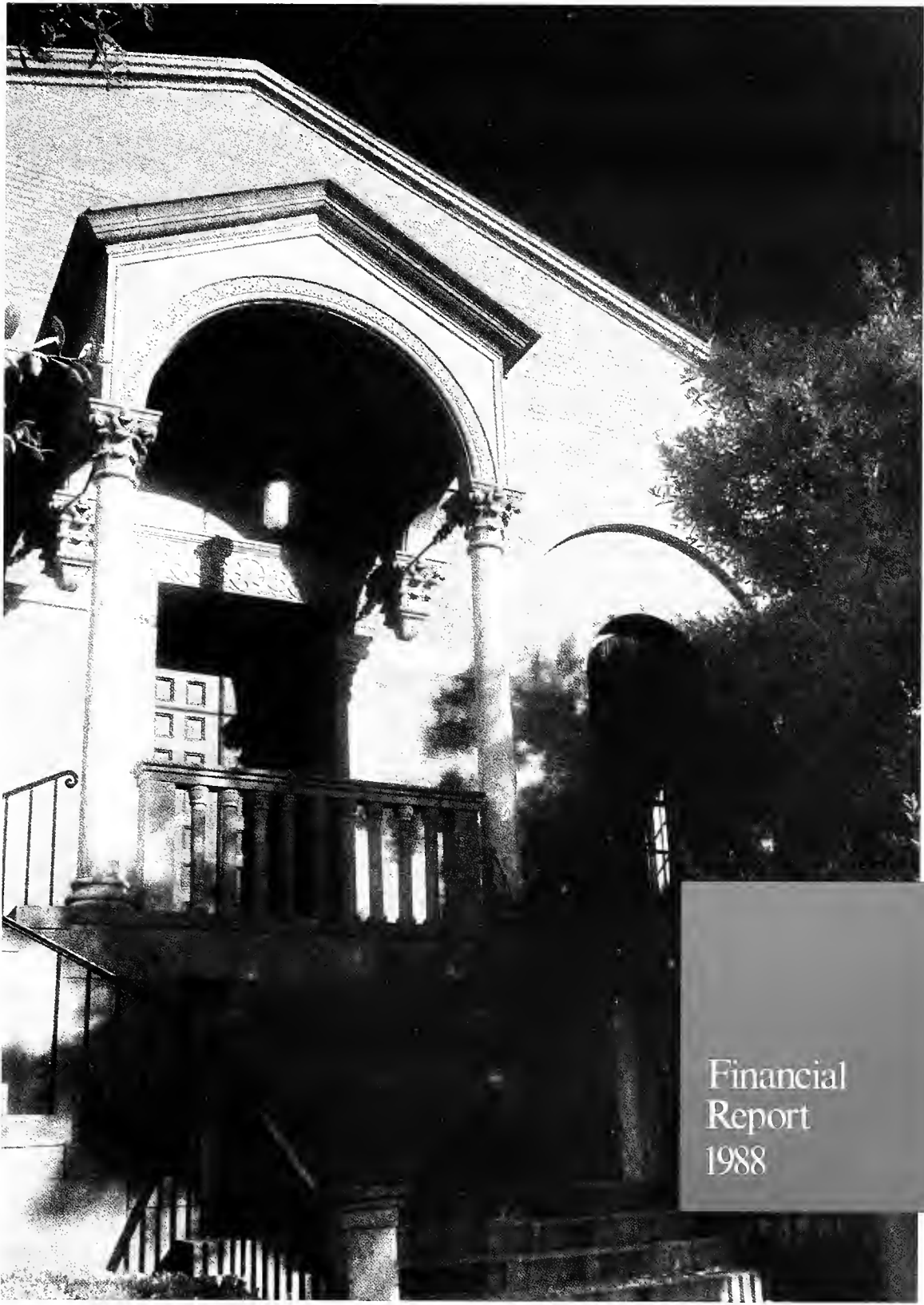
The second option is to continue more or less as we are: a small institution offering excellent undergraduate education, reasonably good graduate offerings across an impressive range of disciplines, including engineering, with small, high-quality professional programs in architecture, business, and music. This option is for many of us very attractive—except that it is untenable in the literal sense that it cannot be held as a static achievement. Institutions do not stand still: they either advance through the disciplined investment of human and financial resources or they gradually retreat to admirable, even beloved, attainments that in time are no more than mediocre.

The third option is to move ahead vigorously in developing further the double identity that has characterized this institution from its founding: to be both a liberal arts college offering an unsurpassed undergraduate education and a major university with distinctive programs in research, scholarship, and professional accomplishment; and to be both of those kinds of institutions in full strength and in ways that mutually reinforce each other. This option has the great virtue of allowing us to focus on what we have always done best—namely, highly personal, even intimate, yet also unquestionably rigorous education of undergraduate students. At the same time it invites and encourages and even requires us to develop distinctive programs of graduate study and research, programs that target areas in which our relatively small scale offers a comparative advantage and thereby allows us to attract the outstanding faculty members to which this university has become accustomed and without which we would not be able to recruit the first-rate students whom we enroll.

I am convinced that we are taking measured strides down the path indicated

by this third option. The end of this road will be a university as distinguished as any in the world—but also a university with the distinctive virtues that have characterized this institution from its origins. I find the prospect of pursuing this path exhilarating, and I invite all of you to join me in carrying a share of the load in moving toward a goal that I hope we all share: as Edgar Odell Lovett put it at the opening of this institution, “a university of the first rank”; and as I think we would agree in adding now, a first-rate university that cultivates the special virtues for which Rice has become justly renowned in its first seventy-five years.

George Rupp



Financial
Report
1988

Auditors' Report

To the Board of Governors,
William Marsh Rice University:

We have audited the accompanying balance sheet of William Marsh Rice University (a nonprofit Texas corporation) as of June 30, 1988, and the related statements of changes in fund balances and current funds revenues, expenditures and other changes for the year then ended. These financial statements are the responsibility of the university's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the

amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of William Marsh Rice University as of June 30, 1988, and the changes in its fund balances and current funds revenues, expenditures and other changes for the year then ended, in conformity with generally accepted accounting principles.

Arthur Andersen & Co.

ARTHUR ANDERSEN & CO.

September 30, 1988



Balance Sheet

June 30, 1988, with Comparative Totals at June 30, 1987 (Dollars in Thousands)

	1988				1987	
	Current Funds	Endowment and Similar Funds	Plant Funds	Loan Funds	Combined	Combined
ASSETS						
CASH, RECEIVABLES AND OTHER ASSETS:						
Cash	\$ 587	\$ —	\$ —	\$ —	\$ 587	\$ 1,089
Accounts receivable	3,792	16,107	—	—	19,899	4,943
Loans, net of allowance for doubtful accounts of \$530 in 1988 and \$325 in 1987	—	—	—	5,142	5,142	5,494
Other assets	1,630	131	—	—	1,761	1,973
	<u>6,009</u>	<u>16,238</u>	<u>—</u>	<u>5,142</u>	<u>27,389</u>	<u>13,499</u>
INTERFUND RECEIVABLE (PAYABLE):						
Interest-bearing endowment fund advances	(197)	10,493	(8,619)	(1,677)	—	—
Noninterest-bearing advances	17,162	(11,916)	(6,694)	1,448	—	—
	<u>16,965</u>	<u>(1,423)</u>	<u>(15,313)</u>	<u>(229)</u>	<u>—</u>	<u>—</u>
INVESTMENTS (Notes 3 and 7)	288	620,525	3,031	17	623,861	510,453
EDUCATIONAL PLANT (Note 6)	—	—	168,089	—	168,089	158,453
Total assets	<u>\$23,262</u>	<u>\$635,340</u>	<u>\$155,807</u>	<u>\$4,930</u>	<u>\$819,339</u>	<u>\$682,405</u>
LIABILITIES AND FUND BALANCES						
LIABILITIES:						
Accounts payable and accrued liabilities	\$ 8,212	\$ 5,627	\$ —	\$ —	\$ 13,839	\$ 6,190
Annuity funds	—	5,911	—	—	5,911	6,067
Total liabilities	<u>8,212</u>	<u>11,538</u>	<u>—</u>	<u>—</u>	<u>19,750</u>	<u>12,257</u>
COMMITMENTS AND CONTINGENCIES (Note 8)						
FUND BALANCES:						
U.S. Government and private grants refundable	—	—	—	3,177	3,177	3,420
University funds—						
Unrestricted	4,305	—	—	—	4,305	4,305
Internally designated	3,846	—	—	—	3,846	3,455
Restricted	6,899	—	—	1,753	8,652	6,917
Income unrestricted endowment	—	291,837	—	—	291,837	238,812
Income restricted endowment	—	157,196	—	—	157,196	124,324
Unrestricted funds functioning as endowment	—	136,923	—	—	136,923	112,131
Restricted funds functioning as endowment	—	37,846	—	—	37,846	30,787
Unexpended plant funds	—	—	4,692	—	4,692	4,599
Net investment in plant	—	—	151,115	—	151,115	141,398
Total fund balances	<u>15,050</u>	<u>623,802</u>	<u>155,807</u>	<u>4,930</u>	<u>799,589</u>	<u>670,148</u>
Total liabilities and fund balances	<u>\$23,262</u>	<u>\$635,340</u>	<u>\$155,807</u>	<u>\$4,930</u>	<u>\$819,339</u>	<u>\$682,405</u>

See notes to financial statements.

Statement of Changes in Fund Balances

For the year ended June 30, 1988, with Comparative Totals for 1987 (Dollars in Thousands)

	1988								1987	
	Current Funds			Endowment and Similar Funds		Plant Funds		Loan Funds	Combined	Combined
	Unrestricted	Internally Designated	Restricted	Endowment	Functioning as Endowment	Unexpended	Investment in Plant			
REVENUES AND OTHER ADDITIONS:										
Investment income (Notes 3 and 7)	\$35,713	\$ 115	\$11,075	\$ 4,124	\$ 4,254	\$ 338	\$ —	\$ 106	\$ 55,725	\$ 42,608
Realized gains on investments (Note 3)	—	—	—	71,814	33,334	331	—	—	105,479	52,995
Gifts and bequests (Note 2)	2,495	—	3,655	9,761	—	1,657	279	—	17,847	23,098
Tuition and fees	16,553	2,523	—	—	—	—	—	—	19,076	17,227
Grants and contracts	4,267	—	16,807	—	—	—	—	—	21,074	18,344
Unrestricted revenues of auxiliary enterprises	13,787	516	—	—	—	—	—	—	14,303	14,028
Additions to investment in plant —										
Direct expenditures (including \$5,624 charged to current funds expenditures in 1988)	—	—	—	—	—	—	12,433	—	12,433	7,753
Repayment of advances from endowment funds	—	—	—	—	—	—	323	—	323	313
Interest on loans receivable	—	—	—	—	—	—	—	239	239	258
Other	449	1,204	92	—	—	276	—	27	2,048	2,627
Total revenues and other additions	<u>73,264</u>	<u>4,358</u>	<u>31,629</u>	<u>85,699</u>	<u>37,588</u>	<u>2,602</u>	<u>13,035</u>	<u>372</u>	<u>248,547</u>	<u>179,251</u>
EXPENDITURES AND OTHER DEDUCTIONS:										
Educational and general expenditures	56,776	4,034	29,528	—	—	—	—	—	90,338	83,327
Auxiliary enterprises expenditures	16,226	658	546	—	—	—	—	—	17,430	16,502
Expended for plant facilities	—	—	—	—	4,669	2,140	—	—	6,809	2,683
Repayment of advances from endowment funds	—	—	—	—	—	323	—	—	323	313
Interest on endowment fund advances	—	—	—	—	—	482	—	130	612	719
Amortization of auxiliary and educational service facilities	—	—	—	—	—	—	323	—	323	1,165
Retirement of plant assets	—	—	—	—	—	—	2,995	—	2,995	2,732
Loan cancellations and collection costs	—	—	—	—	—	—	—	266	266	34
Refunded to grantors	—	—	10	—	—	—	—	—	10	—
Total expenditures and other deductions	<u>73,002</u>	<u>4,692</u>	<u>30,084</u>	<u>—</u>	<u>4,669</u>	<u>2,945</u>	<u>3,318</u>	<u>396</u>	<u>119,106</u>	<u>107,475</u>
TRANSFERS AMONG FUNDS — ADDITIONS (DEDUCTIONS):										
Mandatory—										
Undesignated gifts (Note 2)	(118)	—	—	118	—	—	—	—	—	—
Provision for plant improvements (Note 6)	(3,501)	—	—	—	3,501	—	—	—	—	—
Funding of unrestricted current expenditures for equipment	3,459	—	—	—	(3,459)	—	—	—	—	—
Funding of principal and interest payments for plant additions	(805)	—	—	—	—	805	—	—	—	—
Other voluntary transfers, net	703	725	(30)	80	(1,110)	(369)	—	1	—	—
Total transfers	<u>(262)</u>	<u>725</u>	<u>(30)</u>	<u>198</u>	<u>(1,068)</u>	<u>436</u>	<u>—</u>	<u>1</u>	<u>—</u>	<u>—</u>
NET INCREASE FOR THE YEAR	<u>—</u>	<u>391</u>	<u>1,515</u>	<u>85,897</u>	<u>31,851</u>	<u>93</u>	<u>9,717</u>	<u>(23)</u>	<u>129,441</u>	<u>71,776</u>
FUND BALANCE AT BEGINNING OF YEAR	<u>4,305</u>	<u>3,455</u>	<u>5,384</u>	<u>363,136</u>	<u>142,918</u>	<u>4,599</u>	<u>141,398</u>	<u>4,953</u>	<u>670,148</u>	<u>598,372</u>
FUND BALANCE AT END OF YEAR	<u>\$ 4,305</u>	<u>\$ 3,846</u>	<u>\$ 6,899</u>	<u>\$449,033</u>	<u>\$174,769</u>	<u>\$ 4,692</u>	<u>\$151,115</u>	<u>\$4,930</u>	<u>\$799,589</u>	<u>\$670,148</u>

See notes to financial statements.

Statement of Current Funds Revenues, Expenditures and Other Changes

For the year ended June 30, 1988, with Comparative Totals for 1987 (Dollars in Thousands)

	1988				1987
	Unrestricted	Internally Designated	Restricted	Combined	Combined
REVENUES:					
Educational and general -					
Endowment income (Notes 3 and 7)	\$35,713	\$ 115	\$11,075	\$ 46,903	\$36,954
Tuition and fees	16,553	2,523	—	19,076	17,227
Government grants and contracts	3,334	—	11,441	14,775	13,442
Private grants and contracts	933	—	4,661	5,594	5,102
Gifts and bequests (Note 2)	2,495	—	2,280	4,775	5,597
Departmental sales and services	378	1,123	67	1,568	1,861
Other sources	71	81	4	156	229
Total educational and general	59,477	3,842	29,528	92,847	80,412
Auxiliary enterprises	13,787	516	546	14,849	14,611
Total revenues	73,264	4,358	30,074	107,696	95,023
EXPENDITURES:					
Educational and general -					
Instruction and departmental research	25,000	3,200	10,525	38,725	35,290
Sponsored research	—	—	14,830	14,830	13,631
Other sponsored programs	—	—	1,033	1,033	926
Library	3,783	450	144	4,377	4,155
Scholarships and fellowships	7,659	2	2,420	10,081	9,129
Student services	2,341	41	38	2,420	2,342
Operation and maintenance of plant	8,856	99	408	9,363	9,297
General administration	6,709	227	84	7,020	6,332
Institutional development	2,428	15	46	2,489	2,225
Total educational and general	56,776	4,034	29,528	90,338	83,327
Auxiliary enterprises	16,226	658	546	17,430	16,502
Total expenditures	73,002	4,692	30,074	107,768	99,829
TRANSFERS AND ADDITIONS (DEDUCTIONS):					
Mandatory transfers -					
Undesignated gifts (Note 2)	(118)	—	—	(118)	(73)
Provision for plant improvements (Note 6)	(3,501)	—	—	(3,501)	(2,745)
Voluntary transfers, net	3,357	725	(30)	4,052	8,223
Other additions (deductions) -					
Amount of restricted receipts over transfers to revenues	—	—	1,555	1,555	113
Refunded to grantors	—	—	(10)	(10)	—
Net transfers and additions (deductions)	(262)	725	1,515	1,978	5,518
Net increase in fund balances	\$ —	\$ 391	\$ 1,515	\$ 1,906	\$ 712

See notes to financial statements.

(1) Summary of significant accounting policies—**Basis of accounting—**

The financial statements of William Marsh Rice University (the University) have been prepared in accordance with generally accepted accounting principles for colleges and universities. Accordingly, the financial statements have been prepared on the accrual basis of accounting, except for depreciation of educational plant facilities, as explained below. Limitations and restrictions placed on the use of available resources are recognized in the financial statements through the use of fund accounting. Fund accounting is a procedure by which resources are classified for accounting and reporting purposes into separate funds in accordance with specified objectives or activities. Funds having similar characteristics together with all related financial transactions have been combined into fund groups in the accompanying financial statements.

The financial information shown for 1987 in the accompanying financial statements is included to provide a basis for comparison with 1988 and presents summarized totals only. Certain of the 1987 financial information has been reclassified to conform with current year presentation.

Current funds—

The statement of current funds revenues, expenditures and other changes is a statement of financial activities of current funds related to the current reporting period. It does not purport to present the net income or loss for the period as would a statement of income or a statement of revenues and expenses.

The unrestricted current fund is used to account for those transactions related to the University's operating budget as approved by the board of governors and for certain resources which have been designated for specific purposes by the University administration. These latter items are presented under the internally designated caption. With the exception of the internally designated fund balance, it is the policy of the board of governors to transfer any net increase in the unrestricted current fund balance for the year to unrestricted funds functioning as endowment.

The restricted current fund is used to account for funds expended for current operations but restricted by donors or other external sources for specific purposes. Restricted current fund receipts are reported as revenues when expended.

Current funds used to purchase equipment are accounted for as expenditures of the current funds. Equipment expenditures of the unrestricted current fund are funded by a transfer from that portion of unrestricted funds functioning as endowment described in Note 6.

Endowment and similar funds—

Endowment funds are generally subject to the restrictions of gift instruments requiring that the principal be invested and only the income be expended. Gains and losses arising from the disposition of the investments are accounted for as changes in principal. Endowment funds are either income restricted or income unrestricted as stipulated by the donor. Investment income from income

restricted endowments may be expended only for the purpose specified by the donor; unrestricted endowment income may be expended for any purpose approved by the board of governors.

The board of governors has designated certain restricted and unrestricted funds to function as endowment funds. Restricted funds functioning as endowment are comprised of (a) restricted current gifts transferred to this fund by the board of governors and (b) any excess of restricted investment income over current expenditures. The principal of these funds may be expended, but only in accordance with the original specifications of the donor. Investment income from these funds is also subject to the same restrictions as the original gifts. The principal of unrestricted funds functioning as endowment is spendable at the discretion of the board of governors.

Generally, income from unrestricted endowment and similar funds is reported as revenue of the unrestricted current fund, and income from restricted endowment and similar funds is reported in the fund to which it is restricted. However, investment income from developed real estate and oil and gas properties equal to amortization of the properties is retained in the endowment funds for the purpose of asset recovery. In addition, 27½% (\$1,203,000 for 1988) of the net receipts from oil and gas royalties are retained in the income unrestricted endowment fund after the related properties are fully amortized.

Plant funds—

Plant funds consist of amounts in the educational plant together with unexpended gifts, grants, income and administratively designated funds which are held for acquisition, replacement or construction of physical properties. The educational plant is stated at cost for purchased assets and fair market value at the date of donation in the case of gifts. Auxiliary and educational service facilities financed with advances from endowment funds are depreciated over their estimated useful lives. Although no other educational plant assets are depreciated, it is the University's policy to retire capitalized equipment at the rate of 6½% per year.

Certain capital projects and major maintenance projects for auxiliary enterprises are funded with interest-bearing advances from unrestricted funds functioning as endowment. The advances for capital and major maintenance projects bear interest ranging primarily from 4% to 11%.

In September 1988, the Financial Accounting Standards Board released Statement of Financial Accounting Standards No. 99 (Deferral of the Effective Date of Recognition of Depreciation by Not-for-Profit Organizations). The statement, which is required to be adopted not later than fiscal year 1991, requires all not-for-profit organizations to recognize the cost of utilizing long-lived tangible assets. The University is currently evaluating the impact of this statement and intends to adopt the statement no later than 1991.

Loan funds—

Loan funds include (1) gifts and grants which are limited by donors for the purpose of making loans to students or faculty, (2) the National Direct Student Loan Program financed primarily by the federal government and administered by the University and (3) advances to the loan funds from unrestricted funds functioning as endowment. The interest received on student loans financed by advances from unrestricted funds functioning as endowment is repaid to the endowment funds.

(2) Gifts and bequests—

It is the policy of the University to include gifts as revenues or additions to the appropriate fund balances only when received. Gifts and bequests without any designated obligatory use are required to be added to endowment, according to a legal interpretation of the University's charter. These gifts are recorded as revenues of the unrestricted current fund and as mandatory transfers to the endowment funds.

Pledges outstanding at June 30, 1988, which will be recorded as revenues upon receipt of the gifts, are as follows:

Current funds—	
Unrestricted	\$ 3,000
Restricted	400,000
Total current funds	403,000
Endowment funds	2,161,000
Plant funds	2,203,000
Total pledges	\$4,767,000

(3) Investments—

Investments are recorded at cost at date of acquisition or fair market value at date of donation in the case of gifts, except for investments in wholly owned corporations which are accounted for in the endowment funds under the equity method. Property taxes and maintenance costs on undeveloped real estate interests have been capitalized (accumulated costs of approximately \$2,200,000 at June 30, 1988).

Most income restricted endowment funds, restricted funds functioning as endowment and some unrestricted funds functioning as endowment participate in two common investment pools which are operated on a market value basis. Those income restricted funds, which by the terms of the gifts may not participate in such pools, are maintained on a separate investment basis. Other endowment funds are commingled for investment purposes in the general investment pool for unrestricted funds. Investments are made within established guidelines authorized by the board of governors.

Investments at June 30, 1988, are as follows:

	Recorded Amount
Marketable securities (\$774,318,000 market value)	\$590,944,000
Developed real estate	17,191,000
Undeveloped real estate	5,727,000
Mortgage loans	6,738,000
Wholly owned corporations, at underlying equity	2,025,000
Oil and gas properties (net of accumulated amortization of \$26,410,000)	1,236,000
	\$623,861,000

The following tabulation summarizes investment performance (excluding unrealized gains from market appreciation) for the year ended June 30, 1988:

	Investment Income			Realized Gains (Losses), Net	
	Current Funds	Endowment and Similar Funds	Other Funds	Endowment and Similar Funds	Other Funds
Marketable securities	\$ 42,021,000	\$ 4,273,000	\$ 444,000	\$ 105,426,000	\$ 331,000
Wholly owned corporations	117,000	2,922,000	—	—	—
Oil and gas properties	3,451,000	1,203,000	—	300,000	—
Other investments	1,438,000	140,000	—	(578,000)	—
	\$ 47,027,000	\$ 8,538,000	\$ 444,000	\$ 105,148,000	\$ 331,000

The above tabulation includes approximately \$124,000 investment income earned by auxiliary enterprise investments and \$160,000 reserved to fund future University obligations.

(4) Life income funds—

Life income funds arise from gifts which are subject to the requirement that the University periodically pay specified amounts of the income earned on the assets to designated beneficiaries. Such payments terminate at a time specified in the agreements, usually upon the deaths of the designated beneficiaries. Life income funds in which the University owns the assets and pays an annuity are included with endowment and similar funds.

The assets of certain other life income funds in which the University has a remainder interest are held in various trusts, some of which are administered by a subsidiary of the University. The amounts and timing of the ultimate distributions to the University of these remainder interests are not determinable and, therefore, the assets are not recorded in the accompanying financial statements. At June 30, 1988, the assets (valued at market) and liabilities in the various trusts in which the University has a remainder interest are as follows:

Marketable securities	\$39,931,000
Real estate	2,886,000
Other assets	191,000
Less-Related liabilities	(399,000)
	\$42,609,000

(5) Retirement plans—

Substantially all employees are eligible to participate in a defined contribution retirement plan which is administered by an outside agency. The University's contributions to the plan of \$2,761,000 in 1988 were recorded as expenditures of the unrestricted current fund. The contributions of the University and the plan participants, who are fully vested, are applied to individual annuities issued to each participant.

The University also has a defined benefit retirement plan administered by the same outside agency covering participants who began receiving retirement benefits prior to July 1, 1976, and certain other employees. The University was not required to make any contributions to this plan in 1988. On May 26, 1988, the board of governors approved the termination of the defined benefit retirement plan, which will be replaced by a new defined contribution plan to be combined with the existing plan. As of the most recent benefit information date, June 30, 1988, the sum of the plan's assets of \$1,005,000 exceeded the actuarially computed value of vested benefits by \$198,000. The assumed rate of return used in

determining the actuarial present values of vested plan benefits was 8%.

(6) Educational plant—

Property and equipment of the educational plant at June 30, 1988, are as follows:

Land	\$ 9,507,000
Buildings and improvements	108,464,000
Equipment, furniture and library books	56,570,000
Construction in progress	3,966,000
Less-Allowance for amortization of auxiliary and educational service facilities	(10,418,000)
	\$168,089,000

As a provision for plant improvements, a transfer equal to approximately 10% of unrestricted endowment income has been made from unrestricted current funds to unrestricted funds functioning as endowment. The provision for these improvements is \$4,964,000 at June 30, 1988.

(7) Collateral for loaned securities—

The University participates in a securities lending program administered by a broker using securities held in custody by the University's custodial bank. All loaned securities are collateralized with letters of credit held by the custodial bank and equal to or greater than 102% of the daily market value of the securities. As of June 30, 1988, securities with a market value of \$190,367,000 were loaned through this program. Investment income includes approximately \$449,000 earned from securities loaned in 1988.

(8) Commitments and contingencies—

There are several suits and claims pending against the University, the effect of which cannot be estimated at this time; however, officials of the University and legal counsel believe that the ultimate liability, if any, will not be material to the University's financial position.

The University was committed under contracts at June 30, 1988, for capital improvements and major maintenance of approximately \$8,451,000 to be financed primarily from funds functioning as endowment and gifts. Commitments of \$1,074,000 in the unrestricted current funds and \$1,180,000 in the restricted current fund were also outstanding at June 30, 1988.

The fund balance of unrestricted funds functioning as endowment includes a \$5,000,000 provision for contingencies at June 30, 1988. If funds are expended from this balance, it is replenished by transfers of unrestricted endowment income to maintain the balance at \$5,000,000. No transfers were necessary during fiscal 1988.

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December 1, 1988

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