All institutions of higher education receive support from different combinations of patrons holding different expectations about the rewards of their patronage. In fact, much of what goes on in colleges and universities is the result of accommodation of the interests of governmental, industrial, and philanthropic patrons mediated through the professional filters of faculties and administrations. Moreover, patterns of patronage have changed over time, from the early influence of organized religion to the more recent enlarged role of the national government. The continued patronage of the private sector is virtually unique in American higher education. Private sector patronage in this century has been fueled by income tax laws and the financial advantages of charitable deductions. The motives and methods of private-sector patrons continue to be issues of concern. The federal government has become, and will remain, the dominant patron for research universities. However, the federal government is not, in any meaningful sense, a partner with universities, despite the rhetoric of government-university relations. As social needs change, the priorities of a democratic government change, sharply limiting the ability of that government to make continuing commitments. In addition, for the past 20 years, federal patronage has been of the "purchase order" variety, with virtually no investment in the physical infrastructure of research and uneven investments in replenishing the human resource base. Government patronage can transform scientific decisions into economic and then political decisions. The recent trend toward congressional earmarking of funds for scientific facilities and research undermines the system of competition and merit review. (KM)
Graduate Education and Its Patrons

Robert M. Rosenzweig
Graduate Education
and Its Patrons

Robert M. Rosenzweig
President
Association of American Universities

Keynote Address
28th Annual Meeting
Council of Graduate Schools
November 30, 1988
Colorado Springs, Colorado
Introduction

This meeting is organized around the topic of patronage—to be precise, Graduate Education and Its Patrons. There is a particular reason why I welcome the chance to address this topic. Nearly six years ago, just before I arrived at AAU, I wrote a book called *The Research Universities and Their Patrons*. In it, I viewed the terrain as it then looked. Much has happened since, and it is as welcome as it is unusual to be able to revisit an old topic and provide a progress report. On balance, progress is probably the right word, though it will soon be clear that the record is not one of unbroken triumph. I know that morals are supposed to come at the end of fables, but let me give you at the beginning of this one the moral I draw from it: If we can survive the embrace of our friends, we can probably take care of our enemies.

One further prefatory comment is needed. Virtually all graduate education in this country takes place within universities. And it is wholly dependent for its well-being on the well-being of universities. The principal patron of graduate education, then, is the university. From time to time, governments or foundations may direct attention to the graduate school, usually in order to solve a manpower shortage or as the inextricable accompaniment to some research goals. However, it is rarely a main object of the attentions of either, and it is less likely than undergraduate teaching to attract significant individual philanthropy.

Taken as a whole, graduate education has less of a separate identity than any other major element of the university. Certainly far less than its importance would suggest. It could, I suppose, be said that, historically, graduate education was sandwiched between the long primacy of the undergraduate college and the growth of research as a principal university function. Therefore, it faces both ways and is so embedded in both that it is hard to extricate it from them.

The point of starting this way is certainly not to denigrate an activity of such great and self-evident importance. Rather, it is to say that the most important question for those concerned with the patronage of graduate education is what is happening to the patronage of universities. That is the question I will address this morning, and I hope in doing so to illuminate the...
other topics that form the core of this meeting.

On the face of it, the subject of patronage seems not a terribly complex one. What is at issue is who pays the bills and what they expect in return. Of course, in reality, it's not simple at all. There may be places in this world where it is, but the United States of America is not one of them. We have developed in this country an amazingly complex taxonomy of institutions of higher education performing different functions for different constituencies and under different forms of governance. All receive support from different combinations of patrons holding different expectations about the rewards of their patronage. Indeed, much of what goes on in colleges and universities is the result of accommodation of the interests of governmental, industrial, and philanthropic patrons mediated through the professional filters of faculties and administrations. Universities, as a subset, are somewhat less varied than the whole, but as the membership of the Council of Graduate Schools attests, they are varied enough, thank you.

Moreover, patterns of patronage have changed over time. Early in our history, organized religion was the dominant patrons. It was soon joined by non-clerical private patrons and then by state governments. For much of our history, the national government played a small role, though in the case both of the Northwest Ordinance and the Morrill Act, a critical one in stimulating the development of public, tax-supported higher education. In contrast, the hallmark of the contemporary period is the enormously enlarged role of the national government, primarily in support of scientific research and undergraduate student aid, but by no means limited to those two objects.

I want to emphasize the fact of change in the patterns of patronage. At no time in our history, as we can now look back on it, would it have been justified to conclude that the pattern at the time was immutable. Such a conclusion is no more justified today than at any other time. If we look carefully enough, we can witness changes taking place right now. They are signs of a dynamic society with changing needs and an university system that has shown itself to be highly permeable to the requirements of its patrons and willing to welcome new patrons to the mix. It can be argued that what is most important about universities is to be found in the continuities of their history, not in the changes. I have a great deal of sympathy for
that argument, but it is clear, nevertheless, that today's universities are markedly different from yesterday's and that tomorrow's will be different from today's. One way of charting these changes is through an examination of the university's patrons and their expectations.

The Private Sector

What distinguishes American higher education from its counterparts elsewhere is not the patronage of government, which is universal, but the continued patronage of the private sector, which is virtually unique. It has always been a patronage of mixed motives, rooted in varying combinations of organizational self-interest, personal salvation—or at least justification—commercial gain, and just plain social altruism.

The principal contributions of the twentieth century to this mix have been the birth of the income tax as the government's main source of revenue and the concurrent invention of the charitable deduction. That potent combination greatly stimulated individual private philanthropy, the transformation of private wealth into great foundations, and the large-scale philanthropy of business and industry. Most recently, the tax code has also provided incentives for industrial support of university research.

Academics have long viewed their private patrons with a kind of wary gratitude that is the product of need combined with the fear that your patron may ask for something that you may be unable to refuse. Like Oscar Wilde, we fear that we can resist anything but temptation. Moreover, it has been my experience that academics are more suspicious of the strings attached to private money than of those that may come with public funds, a view that is quite at odds with experience.

That view is less true with respect to straight philanthropy than it once was. The mediation of so much philanthropy through the professional bureaucracies of large foundations carries its own problems, but it has also had a reassuring effect. Moreover, as the hunt for and receipt of private dollars become as important to public as to private institutions, it has become clear that most donors really mean to do good things and are too busy to want to run the university.

The main problem with philanthropy today is the possibility that zealous tax reformers, either through indifference or hostility, will render large charitable gifts economically irrational.
for the giver. From conversations with presidents and development officers, I would judge that the Tax Reform Act of 1986 may have taken a step in that direction.

However, to judge by the volume of comment on campuses and in the popular media, the subject that has kept alive that old ambivalence about the motives of our patrons is the growth of industrial support of university research. It is odd that it should be so. While industrial support of research has grown significantly in this decade, it remains a small fraction of the whole—probably no more than 6 or 7 percent—and it is concentrated in a small number of fields. The answer to the riddle is that the fields in which industry-university collaboration is most active are the highly visible, high-technology fields in which the prospect for gain—to the researcher, the university, the corporation, and the society—seems most dazzling.

As a consequence, a very large popular and professional literature has grown up around the policy issues that arise from that collaboration. That is probably a good thing. Had anything like comparable attention been paid to the emergence of the federal government as a major patron, a number of mistakes might have been avoided.

The relationship between industry and universities has never been an easy or natural one. It was only as recently as the 1920s that Herbert Hoover, then Secretary of Commerce, embarked on a campaign to browbeat industrialists into supporting research in universities. He argued the quite novel proposition that, while Americans had been pretty good tinkerers and inventors, the future belonged to science, and America had no science to speak of compared to the nations of Europe. His speeches on the subject have an eerily contemporary ring in the current concern with American competitiveness. In a speech to a group of industrialists in New York City, he said, "Not only is our nation today greatly deficient in the number of men and equipment for this patient groping for the sources of fundamental truth and natural law, but the sudden growth of industrial laboratories has in itself endangered pure science by drafting the personnel of pure science into their ranks—depleting at the same time not only our fundamental research staff, but also our university faculties, and thus to some degree drying the stream of creative men at its source."

He was much too shrewd to rest his case on an appeal to the
philanthropic impulses of his audience. Indeed, so novel and controversial was the idea of corporate philanthropy that Hoover commissioned Charles Evans Hughes, Elihu Root, and John W. Davis, the three most eminent lawyers of the day, to prepare legal briefs justifying the practice of giving away the stockholders' money. Instead, he pointed out to the assembled businessmen, "The income of Michael Faraday did not, even in his most prosperous days, exceed $500 a year, and yet a hundred years after one of his discoveries, what he gave to the world is more valuable to the world than all the annual transactions of the institutions of commerce and finance in New York City."

He predicted dire consequences if America continued to leave science to the rest of the world, but Hoover's initiative was not a great success with the business community. Had it not been for the emigration from Europe that accompanied the rise of National Socialism, his vision would have been chillingly fulfilled.

There are, of course, real reasons why industry is not wholly comfortable with academic science and vice versa. They grow from the different drives that animate the profit and nonprofit worlds. On the one side, there is a not-unfounded worry that profit-making motives and methods will infect the academic world and in so doing corrupt the values of disinterested inquiry and open communication on which scholarship rests. On the other side, the concern is always alive that academics will not be sensitive to the demands of the market and will not do what is necessary to protect essential proprietary interests. The issues that this tension gives rise to need to be addressed. They are important in themselves, and failure to address them would surely undermine public confidence in the integrity and worth of the academic enterprise. We have recently seen a vivid example at the Massachusetts Eye and Ear Hospital of a conflict of interest which apparently led to outright fraudulent research and violation of important human-subject protections. While that may have been an especially egregious case, it was not an isolated one. Whether rare or not, it is widely charged that the desire for large profits is one of the principal causes of research fraud. Universities, themselves, are groaning for ways to recover some of the economic value produced by their faculty, but do so without embroiling the institution in unacceptable conflicts of interest. Their efforts are the subject of public concern and skepticism, as witness the almost
uniformly hostile editorials that greeted Harvard's quite care-
ful attempt to do just that.

It seems highly unlikely that industry support of university
research will extend much beyond its present disciplinary
bounds or that it will rise greatly as a fraction of total research
support. However, because of its visibility and the consequent
broad public and political interest in it, these issues take on a
disproportionate importance. Their resolution is an important
part of the answer to a key question: Can the university
accommodate the demands of its patrons without giving away
what is most valuable about it? I shall have more to say about
this later.

The Public Sector

For the nation's research universities, public and private
alike, the patron of consequence will remain the federal
government. In a truly revolutionary development, the
federal government has become the dominant patron for
those activities that most distinctively define research-intensive
universities. For most of the first half of this century, and cer-
tainly until the outbreak of World War II, university
presidents could, and usually did, wake up in the morning,
work all day, and go to bed at night without once thinking of
the federal government in relation to their universities. Today,
the government is an omnipresent force on every university
campus, and to treat it with indifference or neglect is to
court disaster.

It is useful to recall the reasons for this change, and also to
recall that those reasons have, themselves, changed over
time.

- The initial impetus for federal involvement came from
  the experience of the war and the requirements of the Cold
  War and several hot ones that followed.

- Funding for biomedical research became largely a
  federal responsibility because of its perceived value in pro-
  moting public health.

- Graduate fellowships grew rapidly as the need for
  college teachers to man the expanding higher education sys-
  tem grew. When that demand waned, the number of
  fellowships shrank even more rapidly.
• Space exploration clearly had a large component of the kind of science and technology that takes place in universities, and as the nation moved into space, the government moved into yet another part of the university.

• During the energy crisis of the 1970s, the government pressed forward with R&D programs on a large scale, and then dropped them, precipitously, as a new Administration with a different philosophy came to power.

• More recently, the emphasis has shifted to economics, and economic development and international competitiveness have emerged as motive forces for the government's interest.

• Perhaps tomorrow the environment will claim top billing and stimulate significant new research activity.

The reason for repeating even that small part of such a well-known record is to prepare the way for an observation that is so contrary to the conventional wisdom that it may verge on being un-American. I submit that notwithstanding this history of patronage—a history that shows remarkable growth in the aggregate—the federal government is not, in any meaningful sense, of the word, a "partner" with universities, and to believe that it is is to court bad policy and deep disillusion.

No metaphor is more pervasive in the rhetoric of government-university relations than that of partnership. It is not hard to understand why that should be so. It is a comforting image, carrying with it the notion of shared burdens and not merely mutual dependency, but mutual responsibility. The trouble is that it is wrong. True partners do, indeed, have responsibilities toward one another that are not breakable except on terms that are agreed to in advance and enforceable by a neutral third party. An objective look at the intrinsic nature of representative democratic government quickly demonstrates why any social institution that enters into a relationship with the government with that expectation makes a large mistake.

In any dynamic society, social needs change, producing new demands on the political system. In a democratic system, those demands are expressed through elected officeholders. Yesterday's top priority may have been research on new energy alternatives, but today's is SDI and tomorrow's is sure to be something else. Moreover, research and development may be at the top of the list today, but tomorrow they may take
second or third place to more pressing needs. If we set aside the possible inconvenience to our own interests, most of us would view that as one of democracy's chief strengths. In the present context, however, it should be seen as a sharp limit on the ability of government to make continuing commitments.

Finally, a partnership is more than a purchase order, no matter how large the sum involved. For the last twenty years, the term "purchase order" is a better description of the transactions between the government and the research universities than is partnership. In that period, there has been virtually no federal investment in the physical infrastructure of research, and investments designed to replenish the human resource base have been episodic and uneven.

None of this describes the behavior of a partner. Rather, it describes the behavior of a long-term, perhaps even permanent, patron, who is sometimes generous, sometimes inattentive, at times quite coldly indifferent, rather flighty and changeable, given to taking action unilaterally, never to be wholly relied upon, and always to be watched carefully.

I am beating this horse so heavily because it seems to me that we are in a period in which the intentions of our main patron are especially hard to read and so need to be watched with special care. There is a large and pressing social agenda that will be impossible for the President or the Congress to ignore, and the claims on behalf of that agenda will come at a time when substitution, not addition, will be the governing rule of federal budget-making. On the other hand, there seems also to be a growing awareness that the capital needs of universities are real and too large to be met without help, and there seems also to be a broadly held belief that research is key to the solution of much of what bedevils the nation.

I do not know how our patron will work that out. I have argued elsewhere that we are certain not to get everything we need, much less what we could use well, and prudent self-interest demands that we help those who will be making the hard decisions. We will do that best if our minds are not cluttered with false notions of legally or morally enforceable commitments due us from our imagined partner in Washington.

Our great public universities are fortunate enough to have two sets of government patrons. What is most striking about the recent development of state patronage is the way in which it has come to interact with federal policy. Even as state funding declines as a share of the total funding of many state
universities, state governors and legislatures have become more aggressive in pressing their economic agendas onto their universities.

It is now virtually an article of faith that building the right kind of research muscle at the state university, or, indeed, at a private university, is a key element in the attraction of industry, jobs, and prosperity. It is too soon to evaluate the truth of that proposition, though we can surely say with certainty that not all such ventures will succeed and that failure will bring with it frustration and disenchantment.

To whatever extent that may happen, it lies somewhere in the future. In the present, however, we have one especially unhappy consequence of this new motive for state patronage of university research, and that is the transformation of scientific decisions into economic decisions and then inevitably into political decisions. The most visible and controversial manifestation of that chain has been the growth of earmarking of funds for scientific facilities and research by the Congress, a practice that evades and undermines the system of competition and merit review on which science policy has been built.

That is not, however, the only way in which the science/economics/politics sequence is changing the behavior of our federal patron. It can be seen also in the move to aggregate money in centers of various kinds, as opposed to the more traditional investigator-initiated project. The scientific arguments for this shift may be compelling, though that is by no means the universal judgment. What is clear is that, as the rewards of winning a center increase, along with the pain of losing one, the local economic consequences are certain to be translated into political action. In my view, all of this is likely to produce a very high price nationally for some relatively small local gains.

That is, perhaps, a subject best left for another time. What needs to be said here is that the transformation of state universities into research-intensive institutions has frequently produced a somewhat uneasy tension between the national aspirations and identifications that always accompany such a development and the local obligations that have historically been the basis for state patronage. That tension may have helped to keep two sets of competing claims in balance. We see here a merging of those two forces and they make a powerful combination, with the potential to change in fun-
damental ways the way the research support system works. That strikes me as too important to pass unnoticed or to be accepted without thought.

The future

We turn now to the future. A successful patronage relationship has to include satisfaction of whatever expectations led the patron to become one. That was a truth that Michelangelo and Mozart faced in their day just as certainly as any university does today. American universities have been wonderfully successful at helping to shape those expectations and then fulfilling them. More than any other universities in the world, they have taken society's demands, and moved—often by expansion—to meet them, while managing to retain their essential character as universities. Given the intensity of the pressures that bear on universities today, will we and our successors do as well as we and our predecessors have done?

Needless to say, I do not know the answer to the question. However, I do know that it will be necessary to change some attitudes before we can hope for successful adaptation. Unfortunately, there seems to have grown among us a sense that these last forty years, unparalleled in our history for the lavishness with which universities have been supported by all of their patrons, are the norm rather than the exception. It has become hard for us to believe that other social institutions could have claims on patronage that, if not intrinsically more worthy, are at least more pressing. As a consequence, not only do we resist, but we resent suggestions that we may need to discipline ourselves and our demands so that other needs may also be met. The recent discussions of the subject of research priorities is the first indication I have seen that there is an interest in building at least a vocabulary of self-discipline and a set of categories for considering the subject. I am not aware that the discussion has extended to areas other than research.

I believe that we will be forced by circumstances to confront one another about the priority of our needs. If it is true that the "Politics of Subtraction" have replaced the "Politics of Addition," either we will change to reflect that truth or we will suffer the consequences. The old ways of doing our business, reflected so vividly in the twelve-page table of contents to the
Higher Education Act of 1986—a veritable road map to the satisfaction of higher education's competing interests—are not likely to survive. I suspect that the vocabulary of the next decade will rely heavily on such words as "discipline" and "proportion" and that other dreaded P-word, "priorities."

There is yet a second consequence of forty years of prosperity. The best way to describe it is that we may have developed a sense that we occupy a special, even a privileged, status in which even wholly legitimate concerns about some aspect of our conduct are viewed as a violation of immunity. Universities and their faculties did not originate, nor did they welcome, rules and procedures for protecting human subjects. They resisted making accommodations to the needs of the handicapped, and they have hardly been among the leaders in dealing with toxic wastes and related safety and environmental matters. Individual institutions have been surprised by allegations of research misconduct well beyond the time when naiveté is an acceptable excuse for mishandling these matters.

In all of those instances, universities came to do the right thing, but only after first insisting that their special status should immunize them from obligations for responsible behavior that apply elsewhere. As the recent hostile Congressional hearings on fraud and misconduct demonstrate, patience with that sequence is wearing thin.

Perhaps this sense of entitlement is just a special case of the quite understandable human tendency to conclude that good fortune has come our way because we deserve it, and therefore, we need not probe the reasons why we have been thus blessed. I have heard faculty on occasion talk about the wherewithal that enables them to do their work the way doctors talk about hospitals and the owners of professional sports franchises talk about new stadiums: Those things exist, or should be made to exist, because they are part of the natural order of things, bestowed on those whose special virtue is that they do good works for the community.

Whatever its source, it seems to me an unproductive way to view the world. My sense is that, increasingly, success in the competition for patronage will depend on the ability to explain what social benefits are likely to derive from the investment sought. Some will resist that challenge because they will find it demeaning; others will respond by promising more than reason will support. Somewhere between those
two positions lies a defensible and important truth. We will need to find it.

It is that need that makes the current concern over the effect of the profit motive on universities so important. We are now grappling before a skeptical public with the need to accommodate an important public purpose, namely, producing economic and social benefits from the products of our research laboratories, while remaining true to the practices that sustain free inquiry and creativity and make universities valuable institutions. This is, in fact, the dominant question for America's universities in the future just as it has been for every past generation: whether they can balance the claims of their patrons—the expectations that lead them to become patrons—with the principles and practices that have made them worthy of great patronage. To make the challenge more interesting, not only do we need to make it all come out right, but we need to persuade the skeptics that we have done so. The latter may be harder than the former.

Recent history offers some cautions and some comfort. In the development of their relationships with the federal government, many universities accepted constraints that were inconsistent with their core values and that would be unacceptable today. The most important are those having to do with secrecy. Whereas the acceptance of classified research was once quite common on campuses, it is much less so now, and where it exists, it is often done off-campus or in some way is insulated from other activities. Certainly, had as much attention been given to the practice of classification as has been given to the question of how long a delay in publication is tolerable for industry-sponsored research, we might have been spared at least the phenomenon of Ph.D. dissertations that could be seen and evaluated only by those who were cleared for the work.

My sense is that we, in the university world, have actually learned from the earlier experience with government and, individually and collectively, have built some resistance to the tendency of those in power to overreach in its demands. Particularly in the area of restrictions on scientific communication, the university community has fought a hard and at least partly successful battle against the worst impulses of the Reagan Administration. Translating that experience to the industry-university setting is by no means automatic, if only because there is no single adversary to bring us together, but
instead an unconnected set of bilateral negotiations between single institutions and single companies. Still, there is reason for some optimism about the lessons learned and our ability to apply them to our newest patrons.

That is not to say that no problems remain. Some institutions will undoubtedly enter into agreements that they will later wish they had avoided. More serious in my view, however, and yet to be proved, is the ability of institutions to deal with abuses by their faculty and staff that grow out of a conflict of interest: to prevent them, if possible, to detect them if they occur, and to punish them if they are detected. There is no doubt in my mind that the most serious loss that American universities could suffer would be loss of the confidence of their public and their patrons in their essentially public-spirited character. It is not a public sin in the United States to want money. However, it is a very different matter to be seen as wanting nothing but money, or even worse, to be indifferent to those who would cheat in order to gain money.

I think it is a concern that we will fail to put our house in order on these matters that propels much of the public interest in the connection between universities and industry and that accounts for virtually all of the adverse comment on the subject. What is most disturbing about popular writing on the subject is that it seems to have turned from a focus on what universities are doing for money to the very different question, Is there anything universities won’t do for money? We have been pressed with that question in the debates over the unrelated business income tax, and we may well hear it in even more strident terms as the press and the Congress become aware of our very newest patrons, Japanese and other foreign industry. There is nothing improper about accepting gifts from abroad; but in the somewhat protectionist atmosphere that now prevails, we had better have ready the reasons why it is right.

I do not wish to paint too grim a picture. In every period universities have had to adjust to new demands and new patrons, and they have done remarkably well in dealing with the problems they have met along the way. I suspect that a decade or a generation hence, much the same judgment will be made. That is certain not to be the case, though, if we assume that we are all free to pursue our separate interests without restraint and that some invisible hand will make things come out right. The opposite is true: Only our own
efforts to help our patrons define their needs and see how we can help to serve them will produce a manageable set of demands and expectations. But even that alone will not do. It must be accompanied by a clear understanding on our part of what is most important about us and an insistence that those elements of our being are not negotiable.

Poetry is not ordinarily a part of our institutional armory, but years ago, W.H. Auden offered a warning to universities. Do not, he wrote, go “greening after the big money/neighing after a public image.” The conditions of modern life have made it a hard warning to heed. At times, money and image have come chasing universities; at times, they have been the objects of tense, even unseemly, efforts. If we can manage to keep our balance, though, I am confident that we will do well by our patrons and by the trust with which society has honored us.