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Excellence in Graduate Education and Research

Western Association of Graduate Schools

David Pierpont Gardner, President
University of California

March 5, 1984
Monterey

I have looked forward to this conference on American graduate education for quite some time, and I deeply regret that circumstances beyond my control--in the form of legislative hearings on the University of California's 1984-85 budget--require me to be in Sacramento today rather than here with you in Monterey. I greatly appreciate the kindness of your President, however, who has graciously agreed to arrange for my paper to be read in my absence.

Graduate education is of rather recent origin in America. From its inception at Johns Hopkins University in 1876 to the conclusion of World War II, it was a relatively small enterprise. Once it was realized, however, that university-based science could yield profound benefits for the national interest, the place of graduate education and research was given high priority by our society. Robert Rosenzweig, President of the Association of American Universities, calls our attention to the uniquely American character of the response in his book entitled The Research Universities and Their Patrons:

Much of the scientific work that proved the practical value of science during World War II was done by university scientists, but not in university settings. There was no necessary reason to conclude from that experience that both

research and teaching would be better if they were done together. . . . The main existing examples of how to conduct basic research were those from institutions in Great Britain and the Continent and from the experiences of the war; to emulate these could well have led to a different conclusion. That those examples did not become America's model is a significant achievement of both education and politics.¹

The combining of teaching and research--which of course was not limited to science but extended to all the disciplines--has proven to be not only a uniquely American arrangement but a uniquely creative one as well. The massive infusion of Federal support during the post-World War II years, and especially during the decade of the 1960s, gave rise to a system of graduate education as remarkable for its diversity as it is for its excellence and vigor. Today, American graduate schools, whatever their imperfections, are the finest in the world.

It must also be noted, of course, that the growth of Federal support for graduate education and research in the 1960s was not sustained in the ensuing decade for several reasons--demographic factors, economic problems, shifts in national policy, public disenchantment with higher education, and changes within the

¹Robert M. Rosenzweig (with Barbara Turlington), The Research Universities and Their Patrons, University of California Press, 1982, p. 2.

universities themselves, among other things. There is evidence that this trend may be turning upward, however, as the Federal government shows a growing desire to support basic research. Nevertheless, funding for our graduate students, graduate programs, and research endeavors is less adequate in real terms than it once was.

The National Commission on Student Financial Aid--of which I was a member--recently issued a report on the condition of graduate education in the United States. Several disturbing trends were noted:

- ° We are faced with what the Commission calls "startling inadequacies" in the numbers of new doctoral students in many areas important to the national interest, e.g., foreign area studies, computer science, some specialties within the field of engineering, and some areas of science. These shortages not only affect the marketplace but also make it difficult for our universities to staff their programs in these and related areas.
- ° While there are shortages in some areas, there is abundance in others. Some fields are nearly closed to the younger and more recently trained scholars seeking university posts. Young Ph.D.s in the humanities, fine arts, and social sciences, for example, find themselves moving from institution to institution, holding term or

temporary appointments while seeking tenure-track positions in their fields. They lack the sense of stability and confidence in their careers that most of us possessed in a time when opportunities were more available. This is a regrettable circumstance, not only because of the adverse implications it carries for those considering academic careers, but also for the ability of our universities to staff their faculties with bright newcomers and to do so in the numbers needed to accommodate the wave of enrollment increases and faculty retirements expected in the mid-1990s.

- ° The Commission was also concerned about the loss of talent to the profession. Many outstanding undergraduate students, who ordinarily would be considering an academic career, are deciding not to pursue advanced degrees because of the tight academic job market, rising costs of education, and reductions in student financial aid. In addition, we are not drawing the number of talented minority students and women we should be attracting. The starkness of this reality is reflected in the fact that, of the 31,000 doctorates awarded by American universities in 1981, Black Americans received only three percent, and Mexican-Americans, Puerto Ricans, and Native Americans each received less than one percent. Moreover, despite some progress in the late 1960s and 1970s, opportunities for women have lagged expectations.

- There is also a dramatic shortage of the physical resources necessary for high quality graduate training and research--plant, instrumentation, and equipment. It is commonly known that deterioration in these areas has been severe in the extreme. My own institution, the University of California--to mention just one example--has estimated that in 1975 twenty-five percent of its equipment and instrumentation was obsolete, with obsolescence continuing at the rate of five percent per year. The difficulties libraries are experiencing are equally worrisome. Many libraries have collections that are literally crumbling on the shelves as a result of acids used in paper since about 1850--and lack the funds to do anything about it.

- The unstable and unpredictable character of Federal support is another major problem. Levels of support have fluctuated in response to changing Federal perceptions of manpower needs in particular fields, shifts in policy direction at the national level, and similar factors. These changes occur unexpectedly and are often of significant scale, e.g., capitation grants in the health sciences, physician augmentation grants, and the like. These fluctuations have been especially troublesome in terms of student support. The number of Federal stipends for fellowships and research assistantships, for example, has declined dramatically from nearly 80,000 in 1969 to about 40,000 today. While few would argue for guarantees

that are unassailable or unchangeable, few would argue for continuance of practices that disrupt, constrain, and thwart our capacity to plan for and to execute major research endeavors responsive to the national interest, advancing of knowledge and furthering of our educational responsibilities.

The issues I have touched on briefly here are, of course, well known, especially to this audience. Some efforts are being made to deal with them. For example, during the past six years New York University has run a "Careers in Business" program, designed to prepare young Ph.D.s in the humanities for work in the business world; Harvard and Stanford have similar programs. Private foundations and corporations have attempted to help as financial aid for graduate students has declined. University/business partnerships of various kinds are emerging, with benefits accruing to each. The growing awareness of the problem by state governments is prompting more sympathetic and concerned response than has been observed in recent years.

The overarching concerns we have, however, cannot be allayed absent a more determined effort by all interested parties to deal directly with this problem, and I include the universities within the definition of interested parties. Drawing on Bob Rosenzweig's book once again:

The American research university depends for its intellectual character on the interdependence of graduate and undergraduate education. . . . When it is functioning at its best, the university is an integrated whole, a harmonious and mutually reinforcing blend of undergraduate, graduate, and professional teaching and research. . . . Sustained inattention or excessive attention to one part of the whole will produce harm to the total enterprise. In the end, each can be healthy only if all are healthy.²

Those of us who have daily responsibility in our universities for those matters cannot avoid our own share of responsibility for the present circumstances. We too readily accommodate shifts within the mix of academic programs as a function of student demand, availability of funds, and pressure from within and without than we really should. Thus, we tend to convey an impression that we are consumer-driven, market-oriented, and no more in control of our internal decision making than external influences will permit. While this assessment may apply more or less to any given institution, it is not irrelevant to a general consideration of what universities might do to help improve their position.

²pp. 25-26

We will fall short of seeking and securing the public and financial support we so crucially need at this point if we fall short of convincing the public and those who represent it in government that we know what we are doing, why we are doing it, where we are at present, where we wish to go, what it will cost to get there, and why the investment needed to effect this outcome will yield benefits to society comparable to or greater than other purposes to which public and private funds might usefully be put.

For us to make a compelling and articulate case requires us to construct a rationale fitted to our own best traditions, to higher rather than lower standards, to greater rather than more modest expectations, to a reasoned balance between graduate education and research and the more general educational needs of our undergraduates, and to a mix of programs that coheres rather than merely responds to the disparate interests of faculties and interest groups in the society who see us as part of their agenda irrespective of what their concerns mean to ours. This will require us to be more thoughtful about the connectedness of our considerations, the consequences of our budget decisions, the implications of course and program approvals, and the significance in the long run of our short-term actions.

We need to strike a clearer balance between our agenda and those of others such that our raison d'etre can be explained, advanced, argued, and defended. To the extent that we are able to do so,

are willing to do so, and do so, we will more likely reap the level of sympathetic and supportive understanding from an informed electorate and a friendly government than would otherwise be possible. I have nearly always found that the elected representatives of the people mirror those who elected them--not on every issue, not at every time--but on balance and over time I believe this to be true. Thus, as universities we need to help create an environment that is more congenial than hostile to our interests, thus enabling elected officials to consider our needs within a favorable climate as against a less friendly one.

Graduate education--indeed all education--is a profoundly important aspect of our culture. It exists in a context that it also helps to create. I like the way it has been described by a former colleague of mine at the University of Utah, Professor Sterling M. McMurrin:

[Education] . . . embodies the burden, conscience, and creative energy of the intellectual life of the people. It is determined by the character of the culture and the social institutions and conditions, but it is at the same time a powerful determinant of that character.³

³"Antinomies of Higher Education," in Philosophy and Future of Graduate Education, ed. by William K. Frankena, University of Michigan Press, 1980, p. 114.

If graduate education is going to be the positive force we need it to be in our culture, we must first adopt some new attitudes and some new arrangements. Most important is that we not allow the pressures of the day to distract us from our commitment to exacting standards and high expectations. We have an affirmative obligation to sustain and to defend against attack not only the academic freedoms needed to do our work but also the intellectual and professional integrity of what we do. The enterprise can be more fundamentally compromised by our own conduct than by a shortage of funds. Rosenzweig makes the point nicely:

Culture and the institutions that sustain it have always depended on enlightened patronage. That is as true for the modern, sophisticated research university as it was for Michaelangelo and Mozart. It is a somewhat more recent truth, however, one born out of the rise of modern organizations, that their fate lies largely in the hands of those who work in them. In the most profound sense, the well being of the research universities rests on decisions made by their faculties, administrations, and trustees. . . . Difficult decisions lie ahead as patterns of support change, as new pressures are added onto old ones, and as new alliances present value conflicts that test again the central purposes of universities. That the process of testing continues is a sign of health, an indication that universities retain an important place in the life of a vibrant society. For that condition to continue will

require enlightened and generous patrons working with faculties and administrations who know what they are about and why.⁴

I am persuaded that if we hold up our end of the bargain, our society will more than hold up its side of the agreement. Thank you.

⁴p. xii.