Mr. Chairman, Magnifico Rettore, respected colleagues, and ladies and gentlemen, as we salute the University of Bologna on its nine-hundredth anniversary, we celebrate also nine centuries of the university in the Western world, and we recognize that the university has become in our time a worldwide institution—grown from the seed that was planted here in Bologna nine hundred years ago. In essence, the university began as and remains a community of scholars—teachers and students—and everything else concerning it derives from that essence. And what is scholarship—that common task which brings teachers and students together in the university? It is the search for and discovery of truth, at the highest level of the human capacity to seek and find truth.

To seek and learn truth is a process of inquiry, of questioning.... When.... questions may not be asked.... or when they may not be answered.... then scholarship comes to an end and is replaced by indoctrination.

The thesis of these remarks is that the university's reason for being—its most fundamental service to society—is to bring together and support those best qualified to seek and learn truth, and that this fundamental mission and service are best performed when the search for and the learning of truth is as free as possible. To seek and to learn truth is a process of inquiry, of questioning. Scholarship begins with the question, What is so? inevitably followed by the question, Why is it so? And the questions that follow inevitably ask, Is it really so? Is it always so? If this is so, then what else is so? If this is so, then how can that be so as well? When such questions may not be asked—when authority can say, This question is forbidden—or when they may not be answered—when authority can say, There is only one acceptable answer to this question, and it is forbidden to ask again or further whether it is true or not—then scholarship comes to an end and is replaced by indoctrination.

In school one learns letters, numbers, and facts. Of course there are questions, but there are ready answers to most of them. What sets the higher learning apart from schooling is the greater emphasis on inquiry, on transcending simple answers to probe further into complexity. The search for and learning of truth is an individual process, carried on by each inquiring mind for itself. The questions therefore inevitably also become individualized: How do I understand this? or What is my interpretation? or What do I believe? The scholarship of both teacher and learner demands the independence of the individual mind.

A community of scholars therefore is not essentially a tranquil place. Established answers will be put to question in the process of being received independently by newly inquiring minds. Differences of interpretation will abound. The search for truth is bound to be critical—this works, that does not; this is true, that is not. Differences lead to disputes, and disputes to arguments, and arguments to controversy. A collectivity of minds required to think independently—to think for themselves—and focused on critical inquiry in the search for truth is apt to be restless, disputatious, and not necessarily respectful toward established order.

Unavoidably, then, universities tend to live in a state of tension with the very societies they serve. On the one hand, they are needed so that the best minds of each new generation can be prepared to serve society in complex tasks. On the other hand, they foster independent inquiry, mental individualization, social criticism, intellectual controversy, and skepticism. Add to this the fact that students are the majority within the university, that they are mostly young, that there is not enough physical labor in academic pursuit to exhaust physical energy, and that universities and those within them are
special in that they are not required to make, sell, or govern things, and there is ready explanation for centuries of feuding between town and gown and for obvious tension between the university and authoritative order in society. Because the established order maintains the university, which cannot maintain itself on its own, those in authority in society feel a responsibility and a need to govern the university in the most orderly possible fashion. Because of its need for free inquiry, independent thinking, open argument, and self-expression, the university will resist being kept in order. And to the extent that authority in society succeeds in having a tame, orderly university in which only the right things are thought and said and in which the wrong questions are never asked—to that very extent will that authority in society be maintaining a university in name only, not a community of scholars but a community of intellectual servants.

Here, then, is where the matter of university autonomy enters in and assumes importance. There can be no functional human community without governance. A community of scholars that cannot best be governed by authority in society must therefore be authorized to govern itself. Autonomy for the university obviously does not mean total independence from society, but it does mean a significant degree of self-governance. Self-governance—autonomy—is often perceived as a special privilege, and so university autonomy is sometimes seen as a privilege claimed and won by the university as a self-indulgence. In fact, however, university autonomy is as important to authority in society as it is to the university. Because authority knows that direct governance of the university would destroy the institution in all but name, autonomy for the university both provides for self-governance and absolves authority in society from direct responsibility for the university's daily life. Thus, authority in society can both maintain the university and at the same time distance itself from some of the university's activities and even blame or denounce some of its individual members.

What does university self-government mean? The single indispensable ingredient is the opportunity for the professors themselves to decide with respect to appointments to the faculty and the promotion of junior scholars. No one familiar with it in any form would claim that the process of professorial deliberations concerning appointments or promotions is elegant or even admirable. However, the choice of professors by any agency other than the faculty itself inevitably opens the door to interference with the search for and learning of truth—for example, to reward only orthodoxy and to penalize an unpopular line of inquiry or criticism. Again, this is not to say that professors themselves are not perfectly capable of intolerance or prejudice, but only that the chances of damaging the essential need of the university to pursue inquiry without hindrance are less with professorial self-government than with a role for an outside agency, especially government.

The second vital ingredient of university autonomy is the freedom of the faculty to decide what shall be taught. In this matter it is less important that faculty be free to decide on every course of study than that no agency outside the faculty can forbid a course of study from being offered. While there is obvious logic in letting professors themselves decide what they are best prepared to teach, the need for instruction in a particular subject may be so urgent for a society that external authority may wish that the subject be offered and even required of students. This invades academic autonomy but does not necessarily destroy it. The outlawing of a subject or line of inquiry does, however, represent a denial of university autonomy. True, the faculty itself may outlaw a subject and thus curtail its own freedom of inquiry and instruction, but even such a decision within the faculty is better than a veto by external authority over the subjects of university research or instruction.

A third aspect of university autonomy consists of the opportunity for only the faculty to decide on the performance of students. As much mischief as professors may do in evaluating students, they are best qualified to perform this task, and, once again, the intrusion of an external authority threatens to restrain the search for and learning of truth. Under ideal circumstances, the university would be free to select its students, but the ability to select is less significant than the ability to evaluate the performance and to dismiss or fail students who do poorly. External examinations may also determine whether a student has learned enough to qualify for an external license or certification, but only the faculty can judge the worthiness of student performance per se.

Fourth and finally, the administration of the university needs to be placed in hands selected by the university itself if university autonomy is to exist. Traditionally, the most effective way to achieve this has been the election by the professors of the person presiding over the administration, which usually has also meant that one of the professors assumes administrative leadership for a limited term of office. There are, however, other ways of selecting an administrative leader that also maintain university autonomy, such as elections by a university senate composed of members of the university other than faculty, as well as professors, or elections by governing boards committed to university autonomy. What is not acceptable in terms of self-governance is to place the administrative leadership of the university in hands picked by an authority external to the institution. A president or rector imposed by and responsible to social authority outside the university could all too easily use administrative leadership to restrain both inquiry and learning by penalizing any perceived departures from orthodoxy.
The point once again is not that the university is entitled to special privileges of autonomy or an indulgence or luxury, but that its utility to the society in which it exists and in which it serves is greatest when both inquiry and learning are as unrestrained as possible; and that university autonomy may not guarantee this condition but may offer the best hope of its achievement and maintenance.

The question of university autonomy has taken on new urgency and new dimensions in our time. Essentially, this is due to the explosion of science and technology that began in the nineteenth century.

If these thoughts express the fundamental considerations regarding university autonomy—stated as broadly as possible to apply to the university as an institution in as many social settings and circumstances as possible—then they are about as old as the university itself—nine hundred years!—and were as true some centuries ago as they are today and will be in centuries to come. But the question of university autonomy has taken on new urgency and new dimensions in our time. Essentially, this is due to the explosion of science and technology that began in the nineteenth century, but the impact of this phenomenon has affected the university in several ways, of which at least a few merit special attention.

In the wake of the Enlightenment of the eighteenth century, when rationalism among other things loosened the bonds of religious orthodoxy, the pursuit of truth in inquiry and learning produced a remarkable growth of the natural and physical sciences in the university, followed shortly thereafter by a new concentration on the resulting technology. Biology, chemistry, and physics became fertile fields of discovery, and these discoveries led quickly to their application in what were first called the mechanical and agricultural arts and sciences and later engineering. The university, always committed to inquiry, now became the home of discovery as well. The expectation of new knowledge, new science, and new applications, all of enormous consequence to society, lent new importance and respect to the university. New universities were founded in profusion as a result, and the size and complexity of universities greatly increased. Above all, however, the advent and growth of modern science served to underscore the utility of unrestrained academic inquiry and learning, and this also underlined the need for university autonomy.

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So far, so good. In time, however, problems arose with the cost of the new science and technology, which required ever more and ever more complex laboratories and, in our time, ever more and ever more complex instrumentation as well. In older days, the university had a cost, of course, but in relative terms the expenses of the

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contemporary university literally dwarf the funding needed only a century ago. Funding for universities accordingly became a major item in government budgets, increasingly requiring planning and, in time, the allocation of resources selectively to some universities rather than to others. And, inevitably, hugely increased funding provided by social authority carried with it both increased accountability and an ever-rising tide of regulation and supervision from sources external to the university. None of this necessarily involved direct invasion of academic self-government in terms of the university's
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opportunity to select its own professors, set its curriculum, evaluate its students, or select its own internal administration. However, the opportunity for the university to expand inquiry into new subjects, to attract professors whose work required specialized laboratories or equipment or both, and to respond to all student interest in instruction—at least whenever special facilities were required—was clearly limited to what could be afforded because it was funded. University autonomy therefore has been restricted to some degree in the age of science and technology, even when freedom of research and teaching was regarded as more important than ever, simply because of the huge expenditures required by the modern research university.

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At the same time, science and technology in their ever-increasing complexity and sophistication transformed society and created urgent needs for individuals trained to apply and refine new tools and new procedures. The university always produced students to enter what were once called the learned professions, but in our time the diversity of professions has vastly proliferated, and many appear to require less fundamental learning than highly developed technical skills. The university grew, not only in numbers of students, but also in the number of new academic disciplines, many of which correspond directly to new professions that looked to the university for their entering cadres. As part of this process, public perception of the university's role experienced a partial transformation. Instead of being regarded as the seat of scholarship that produced inquiring minds prepared to enter professional careers, the university has come to be viewed, at least in part, as a semi-industrial enterprise that is expected to produce both new discoveries and highly skilled workers for the upper strata of the social economy. According to such a perception, universities can then be assigned goals and quotas—goals at least in targeting certain areas of work, and quotas in terms of a cadre to be produced: so many physicians, so many engineers, so many managers of enterprises, etc. To the extent that the university remains free to pursue non-targeted inquiry on its own and to teach students in non-quota fields, it may then be argued that university autonomy remains intact and that social authority merely is being explicit about the need for a set of urgently needed services. Even if this argument is correct, however, a basic problem remains. The university's mission is to nurture inquiring minds, whose ability to inquire and learn further is fundamentally more significant than the factual knowledge they acquire in the learning process. To the extent, therefore, that student and public perception puts the focus only on learning a skill well enough to perform it in society, the essential mission of the university is being undercut. Happily, the pace of scientific and technological change remains so rapid that it is obvious that no skill, once acquired, is likely to last very long without change. As a result, there is appreciation of the need for further inquiry and learning on the part of university graduates. Nevertheless, part of the autonomy of the university resides in the opportunity to use its own criteria for the evaluation of students, and that opportunity should be safeguarded against the modern social tendency to demand skilling rather than learning for the university's students.

In fact, part of the university's responsibility is to continue to justify its autonomy by insisting on some of the traditional fundamentals of learning in the face of the scientific and technological explosion. Over nine centuries, the university has generally succeeded in preserving and enhancing its autonomy vis-à-vis social authority and the application of its power. It would be ironic, and fatal, to have resisted social authority only to succumb to money now. Regrettably, the tradition of university autonomy contains no safeguard against voluntary surrender to external pressures, pressures not imposed by authority but rather created only by offers of support. However, if the university concentrates only on that which pays and thus surrenders its fundamental mission of scholarship, both the utility of the university to society in the long run and its need for autonomy to achieve its maximum highest utility become equally irrelevant. Indeed, such an evolution would destroy from within the university as we have known and celebrate it here today. Its success would result merely in an academy of technology, much like the military academies that have existed for decades.

Finally, the impact of science and technology has not only transformed the university into a much larger, much more diverse, and much more expensive institution; it has also produced a new social environment within which—and as part of which—the university functions. As a large and complex organization within a society of large and complex organizations, the university unavoidably has bureaucratized itself. It functions also, like any other public institution, in the full light of public scrutiny and public accountability. As is true of all other communities in the most scientifically and technologically developed societies, earlier intimacy and human scale are being eroded by size, systems, and procedures.

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University as we know it is not new; that it has undergone change and innovation before; that its roots are indeed nine hundred years old, and venerable; and that a sense of how and where it originated and how it has evolved is still a guide to its inevitably uncertain future. Therefore, it is a true privilege to offer these thoughts on university autonomy as part of this historic celebration of the university—yesterday, today, and tomorrow.

THE AUTHOR

STEVEN MULLER became the tenth President of The Johns Hopkins University on 1 February 1972. Between 1972 and 1983, Dr. Muller also served as President of The Johns Hopkins Hospital. Currently, he is Chairman of the Trustee Policy Committee for The Johns Hopkins Institutions, and he remains a Trustee of the Hospital. In addition to his duties at Johns Hopkins, Dr. Muller is also a Director of the Baltimore Museum of Art; Beneficial Corporation; Alex Brown Inc.; CSX, Inc.; Maryland Academy of Sciences; Millipore Corp.; and Organization Resources Counselors, Inc. He is a member and former Chairman of the Association of American Universities, a member of the Committee for Economic Development and the Conference Board, a Trustee of the German Marshall Fund of the United States and the Consortium for the Advancement of Private Higher Education, and a Director of the American Institute for Contemporary German Studies. Dr. Muller is also a member of the American Association of Rhodes Scholars, Phi Beta Kappa, the Council on Foreign Relations, and the International Institute for Strategic Studies. He is a member of the Board of Editors of Daedalus and a Fellow of the American Academy of Arts and Sciences.

Dr. Muller is a specialist in comparative government and international relations, particularly concerned with political developments in Europe. He is the author of a textbook in comparative government and of a number of professional articles in this field. In recognition of his contributions to German-American relations, Dr. Muller was awarded in 1980 the Commander's Cross of the Order of Merit by the President of the Federal Republic of Germany. In addition, in 1988 he was named Commendatore of the Order of Merit by the President of the Republic of Italy.

Dr. Muller was born in Hamburg, Germany. He first came to the United States in 1940 and has been a naturalized citizen since 1949. He graduated from the University of California at Los Angeles in 1948. From 1949 to 1951, he was a Rhodes Scholar at Oxford University in England, where he received the B.Litt. degree in politics in 1951. He first went to Cornell University in 1951 as a graduate student in the Department of Government and received his Ph.D. in 1958. He served in the U.S. Army Signal Corps from 1953 to 1955.