

## HIGHER EDUCATION — CHANGE AT THE TOP

*by Robert L. Minckler*

*Caltech's Board  
of Trustees in  
the academic procession  
at Caltech's  
1963 Commencement*



During most of human history, management of affairs has been in the hands of individuals or small groups of individuals whose authority had certain features which would be considered very bad today:

1. The authority of the management was absolute. There was no machinery at all for questioning the decisions of management in political or religious or economic matters.

2. Managers were self-appointed. The people most affected, those who were being managed, had no voice in the selection of managers.

3. Management was self-perpetuating. The au-

thority of the king automatically passed to the prince, that of the Pope to another Pope selected by a small group from its own members, that of the rich man to his eldest son.

As time wore on, and as human society grew in complexity, this system of autocratic, automatic management showed inherent weaknesses; the ideas of individual rights and social justice became widespread, and the system fell apart. The kings were dethroned or their authority was removed; managers of affairs were elected by the common people; there was the splintering of religious authority through the Reformation; stock-

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holders in business enterprises threw out the incompetent sons of the founder's family; estate and inheritance taxes absorbed large estates and were applied to public purposes.

Today, there are very few examples left of the old system of management. There are still a few divine-rights kings left; there are the communist countries in which small groups operate as the kings-of-old did.

But in the western free world, about the only example of the old autocratic, undemocratic system of management is found in the Boards of Trustees of American independent universities and colleges such as Caltech.

Make no mistake about the absolute authority of the Caltech Board of Trustees. Let me quote various provisions from our charter and by-laws:

“All corporate powers of California Institute of Technology shall be exercised by or under authority of, and the business and affairs of the Corporation shall be controlled by, a Board of Trustees.” The Board of Trustees may elect a President of the Institute to hold office at the pleasure of the Board . . . He shall have such powers, duties, and privileges as may from time to time be prescribed by the Board of Trustees . . . All faculty members of the Institute are appointed by the Board of Trustees . . . All officers and instructors shall receive such compensation as may be fixed by the Board of Trustees.”

These few quotations should demonstrate the unquestionable fact that the authority of the Caltech Board is absolute in all the operations of the Institute.

And who decides who shall have these unlimited powers? Why, the Board itself, of course. We elect ourselves. There is none of that democratic nonsense permitted, which might allow some voice to those most directly affected — say the faculty, the students, the alumni.

The Board is self-perpetuating. We re-elect ourselves and we fill vacancies on the Board by our own exclusive franchise.

There is nothing unique to Caltech in this system of management; the pattern is much the same in most of the independent colleges and universities in America, and the system dates back to the establishment of the earliest educational institutions in our country. These early colleges were founded, in most cases, by church groups. An early Board of Trustees was, in most cases, made up of ministers of the founding church, whose principal interest was to assure that only the real truth, as established only in their particular sect, would be taught in their college! So, they established this autocratic control and they wrote minute instructions for the proper conduct of faculty and scholars. For example, a document titled “The Lawes Liberties and Orders of Harvard Colledge confirmed by the Overseers in the Yeares 1642 to 1646 and published to the Scholars for the perpetual preservation of their welfare and government” includes the following decree: “Scholars shall bee slow to speake, and eschew not only oathes Lies and uncertain Rumours, but likewise all Idle, foolish, bitter scoffing, frothy wanton words and offensive gestures. . . . Nor shall any without the license of the Overseers of the Colledge goe out to another towne.”

The Caltech Board has never issued such detailed instructions concerning the conduct of faculty members of the Institute, although it must be confessed that there have been occasions when such action looked pretty attractive to some members of the Board.

It is a strange fact that under this autocratic form of management, in which not even the most powerful electron microscopes can detect a single chemical trace of democracy, our private colleges and universities have come to represent, in their

actual operations, the very essence of democracy and freedom and tolerance. It is almost universally accepted that a faculty member has an absolute right to make a fool of himself without any fear of reprisal from the Board of Trustees. There are cases in which the faculty member is required to follow the party line, to conform to predetermined doctrine, especially in some schools of economics and education, but these violations of the principle of academic freedom have been imposed by the faculties of these schools, not by the Boards of Trustees.

The system of American college trusteeship has worked out very well, despite its authoritarian form, because Boards of Trustees have, on the whole, demonstrated remarkable wisdom and restraint in exercising their great powers. Over the years, there has developed a rather clear and rather universal concept of the roles to be played by the trustees. Their particular field of interest is in finance, in raising money, in managing the endowment portfolio, in protecting the property of the institution, in establishing rules for budget control, in setting salary scales, in hiring auditors—things of that kind.

Another task which is definitely assigned to the trustees is the selection of the president of the institution, but this is a task which does not come up very often. College presidents seem to lead charmed lives; they live forever and they hang on to their jobs forever.

### *No meddling*

As to the principal operations of the institution the trustees are supposed to be managing, instruction and research, their duties are practically non-existent. Their role is a negative one, described in two words: "Don't meddle." One study of the management structure of 91 institutions found only five that had trustees' committees concerned with academic policies.

Now there is a strange stirring going on in the academic world, a new cycle of interest in the management of higher education, and this has extended to cover new consideration of the role of trustees. The result has been a great number of studies, books, and articles on educational management, probably more in the last five years than in all preceding time.

The reason for this great new interest is quite obvious: it is the very large and very rapid increase in the size of the college operation. Caltech is an example of what has happened. Five years ago, Caltech's campus expenditures for instruc-

tion, research, student aid, plant operation, and administration were \$8,100,000. Our budget for next year for these same operations is \$20,560,000. Five years ago the net asset value of Caltech at market prices was \$83,500,000. A year ago it was \$137,000,000 and today is in excess of \$150,000,000.

Despite this enormous and rapid growth, which has occurred not just at Caltech but throughout all institutions of higher learning, the public demand for growth has not been met, and it is probable that we face, for some years to come, rates of expansion something like the ones we have experienced in the past few years.

### *Problems created by growth*

This has naturally brought up questions about our capacity to handle the problems created by growth. In the fields of instruction and research, can we attract sufficient numbers of qualified scholars to meet the demands? Can we provide the space and tools required by the scholars? Can we sort out from the great variety of growth projects the ones which should have priority or which fit the particular field of activities in which a particular school is especially knowledgeable?

Can we prod instructors to make the necessary changes in curriculum to adequately challenge the better prepared students? Can we intelligently plan and program the changes in personnel, in buildings and equipment, in methods and procedures, in curriculum, at the kind of an institution we operate, so that the objectives we have, both short-range and long-range, can be realized?

It is certain that many of these challenges must be met by the faculties. Certainly the faculties alone are qualified to determine what shall be taught and what teaching methods shall be used. Certainly the faculties alone must determine the fields of research in which they shall work, and they must establish the methods and programs to be followed in research.

In a static or slow growth situation, leaving these matters in the exclusive hands of the faculties presented no particular problems, and that was in general the situation up to only a few years ago. But the explosive growth of the recent past has brought about new kinds of problems which might be described as those of planning and programming growth and expansion. It is no longer sufficient that the faculty knows what it would like to do in education and research; these ambitions must be geared into the financial framework of the overall operation. It is now necessary to do long-range planning of the kind carried out

in large business organizations.

The training and experience of most scholars do not provide them with know-how in this operation of long-range planning and programming. The best teacher or researcher is one who firmly believes two things — that the work he is doing is the most important thing going on in the world, and that he is the best qualified person in the world to do that work. These attitudes are of enormous importance in doing a really superior job, but these attitudes are not the kind which are particularly helpful in setting up plans and programs for the overall operation of the institution and the establishments of priorities among the expansion projects.

In the past, Boards of Trustees have depended almost entirely upon the faculties and staffs for the initiation of projects, for budgets, for programs in instruction and research. Trustees have conceived of their part of the process as just consideration and usually just pro-forma approval of the recommendations of the faculty and staff. This has not been an entirely satisfactory system in a period of rapid growth. Things, on occasion, got out of balance.

### *Out of balance*

An institution might get a new computer, for example, a year or more ahead of the time when there is a building to put it in. Substantial funds for a specific purpose might be received before a program of spending those funds for that purpose is established. Overall resources might grow faster than an overall balanced expansion plan is established. Certain activities might be over-financed by specific grants while other activities are starving for funds. Some department chairmen and deans might be more aggressive in devising ways to spend money than others are.

There has been a general and widespread recognition of the difficult administrative problems which have arisen under the old system, and a rather general acceptance of the idea that the trustees might be helpful in establishing more orderly procedures in the growth process. So there have been a considerable number and variety of programs established in various institutions to bring the trustees into closer contact with the educational and research activities.

There is no pattern as yet established to accomplish this, but there are a lot of experiments going on. For example, Columbia University has formally added a definite educational function to the duties of its Board of Trustees, as follows: "To

oversee and approve the *kind* of education offered by the university, and make certain that its *quality* meets the highest standards possible."

In some institutions, dual Boards have been established — the Board of Trustees retains its position of formal control with absolute powers, but a second Board or Committee on Educational Policy deals with the faculty in matters of instruction and research, but without any authority. In some institutions, visiting committees or advisory councils for individual schools or departments have been established, with some trustee members but also with community representatives, to discuss with the faculties the educational and research programs and the ways in which the programs can be made more effective in meeting the needs of the community.

Out of these experiments there may in time come a pattern of what is the correct procedure, but it is more likely that the elements of individuality in the separate institutions will make it desirable that no common pattern will result. What works at Harvard may not work elsewhere.

At Caltech, we have established certain procedural and organizational changes designed to create effective and continuing communication between trustees and faculty. Thus the trustees will have a better understanding of the educational and research programs being carried out, and the faculty members will have a better understanding of the overall resources of the institution available to carry out these operations. Both trustees and faculty members will participate in long-range planning, fitting together the duties of the faculty to make Caltech preeminent in the quality of its educational and research efforts with the duties of the Board to manage the financial affairs of the Institute so that this ambition can be realized.

### *Faculty reports*

So we have done several things. At each monthly meeting of the Board, we have a report from a faculty member on some phase of educational or research activity. At the annual budget meeting, certain faculty members hear the budget presentation to the Board and the discussion of the budget by the Board.

We have re-established meetings of the Executive Committee of the Board to take care of the routine details of personnel appointments, contract approvals, and consideration of proposals, leaving the Board meetings open for discussion of overall policies and a chance to consider where

we stand in the overall condition of the Institute.

In my personal view, the most important action the Board has taken is the establishment of an Advisory Council for each of the departments of the Institute. On each Council are three or more members of the Board and three or more faculty members.

This organization change is still experimental, but the idea is that the Councils will operate in about the following manner. Each council will meet more or less regularly, perhaps three or four times a year. At these meetings, it is expected that the faculty members will educate the trustee members on the kinds of educational and research programs going on; on the needs of the department for personnel, space and equipment; on the opportunities for growth and expansion which exist and what is required to convert those opportunities into accomplishments.

### *The trustees' contributions*

On the other hand, it is expected that the trustee members of the Councils will bring to the meetings their knowledge of the overall resources of the Institute and their knowledge of business-like procedures in converting dreams into programs and, hopefully, into realities. At these meetings, there should be open and frank discussions of problems and weaknesses that may exist, potential blind alleys which may be developing; needling as to why certain programs may be faltering, why programs for which funds are available may not be proceeding, why the services of that outstanding scholar could not be secured, or why we are losing a very promising fellow.

One result of these Council activities will be the annual budget for the department with which the trustee members of the Council are thoroughly familiar. The trustee chairman of each Council is also a member of the Board Budget Committee, so that when the Board committee considers the overall budget of the Institute, it will have members who are thoroughly grounded in all of the department budgets.

Also, it is expected that each Council will come up with a three-year forecast, incorporating the expansion programs which have been considered by the Council and judged to be necessary or desirable. This three-year forecast will not be just an exercise in guesstimating. For example, if it is determined that some new research program should be undertaken, but that the problems of creating space, securing equipment, and staffing

the operation will extend beyond the one-year budget period which is the only budget at present approved by the Board, the Board may definitely approve the project, after the Ways and Means Committee of the Board has determined that funds will be available. This three-year forecast provides the machinery by which a department chairman may make a definite commitment to that outstanding scholar who will not be available until two years from now that there will be a job for him at that time. This forecast is not an idle dream; it can be a very important tool in long-range planning.

Also, in time, we expect that each Council will produce a ten-year outlook. This will, of necessity, be highly speculative, but it will supply some possible parameters of the size of the operation which may be going on in the distant future; and it will point up trends which may unbalance ratios between education and research, or between the sizes of undergraduate and graduate student bodies, or between one discipline and others. These may be desirable or undesirable, but they should be recognized long before they are upon us. In any event, this formal procedure for long-range planning is better than just extrapolating past rates of growth into the dim and hazy future.

### *More effective service*

These are the ways in which it is hoped that the trustees can increase the scope and effectiveness of their services to the Institute. We have on our Board some very capable men, who in long and responsible business careers have acquired experience and skill in the arts of long-range planning and financial management, and these are the qualities needed, along with the professional skills of the faculty in educational and scientific disciplines, to make Caltech the kind of an institution which the nation needs and must have.

As I visualize the results, each of the three parts of the operation — faculty, administration, trustees— will perform those duties which it is best equipped to do: the faculty, instruction and research; the administration, coordination and leadership; the trustees, planning and finance — but each group will be thoroughly informed about the operations of the others. In this way, we will maintain at Caltech, during this period of rapid growth in size and scope, the same kind of friendly, cooperative, constructive community which it has always been in periods of less vigorous growth and less complexity.