It has always been a source of wonder to me that some Caltech students can become terribly exercised over the number of times tunaburgers are served to them, or the hardness of the pillows on their beds, but have generally been unconcerned about the bomb, war, or the state of society. In 1961 they were not yet prepared to enter the arena of political and social action. They were still addicted to the complex practical joke.

I remember one night standing out by the parking lot next to the Keck engineering building and watching a long line of cars dutifully following a carefully marked, tortuous course. It turned out that some boys in Page House had placed detour signs on Del Mar Boulevard, routing the traffic on one of Pasadena’s major arteries through the dark parking area. When a police car inadvertently got caught in the maze, the jig was up.

One memorable incident from those years began with an irate phone call to Dr. DuBridge from the latest husband of a famous movie star. The luminary’s daughter, the gentleman averred, had been rendered pregnant by a Caltech student. I called the expectant father to my office. Had he perpetrated the awful deed? He responded that it seemed quite likely. He had been the passive partner and as the flesh is weak, we limited ourselves to asking him to move off campus where he might pursue his interests undisturbed. The last time I saw him, he just lost a considerable amount of money to a man whom he had discovered playing a game involving three walnut shells and a pea! Not all Caltech students are geniuses.

In 1963-64 a disturbing percentage of the freshman class determined to leave Caltech and pursue their studies elsewhere. The actual number was really not much higher than in previous years, but the quality of those intending to depart was. They were among our best students, and what was particularly disquieting was that most of them were not disenchanted with science but with the Institute. I asked some of these boys to put their thoughts into writing, and the results were revealing. One
Among the greatest virtues of the Institute is the personal freedom its students enjoy. This freedom implies a philosophy of education that encourages independence and responsibility, that shuns restrictions on the life of an individual. It is highly ironic that at an educational institution characterized by such a philosophy the students' lives should be narrowly restricted, that their primary interests and aspirations should conform so closely to a single pattern...

Two factors contribute to the deficiencies I have just suggested. The first of these is the limited range of the students. No humanities majors are available for discussions on campus... Nevertheless the atmosphere is not scientifically enthusiastic nor is it, in general, scientifically stimulating... Concern with science, when it exists, is suppressed by a self-defensive cynicism. At the same time, an indifference to the humanities, politics, religion, and philosophy is present...

Compounding the tendency toward intellectual indifference is the volume and intensity of work required by the Institute... I am not bitter about the work here; I am, however, bitter about the sacrifice of a full educational experience and the sacrifice of an intellectual spirit that has been made at the altar of work...

The effect of this statement and others like it was sufficiently disturbing to the faculty that a committee on the freshman year was appointed. Out of their many months of deliberation some important changes arose. At the same time the newly appointed and forward-looking provost, Robert Bacher, took advantage of the presence of Carl Rogers—the father of non-directive, client-centered therapy— in southern California to appoint him an educational consultant to the Institute. A number of the faculty met with Rogers almost every month for the best part of two years, and these meetings provided a significant catalyst for change at the California Institute of Technology.

To start with, the division of humanities formulated a program which offered freshmen some choice of courses in their first year. This moderate reform led to a proposal to offer undergraduate majors in nonscientific fields in which we were well staffed, i.e., history, English, and economics. It was argued that we would thus keep at the Institute some attractive boys who might otherwise leave. It was also argued that, given the amount of required science, the Institute might produce a truly unique product—a humanist or social scientist with a high level of sophistication in the sciences. Eventually the faculty and trustees approved these majors.

The committee on the freshman year was also wrestling with how to make the first year at the Institute less traumatic. Though no one considered it a panacea, there was general enthusiasm among the committee members for the concept of giving freshman grades of "Pass" or "Fail" only. After endless discussions, the scheme was voted into operation for a two-year experimental period. It turned out to be a great success and is now a permanent part of the Caltech system.

To understand the level of the responsibility of the trustees, faculty, and administration of the Institute for the welfare of students, it must be remembered that we are blessed annually with the most talented group of entering students in the country. In a sense they are unspoilable, and faculty bosoms swell with pride as they progress through the BS and to a PhD. But are they really being educated and turned into creative human beings? Would they have been more creative and exciting had they undertaken their studies elsewhere? That the California Institute offers an excellent formal education seems incontrovertible. But what about the area of informal education? Is the sacrifice the undergraduate makes to attend the Institute worth it? Admittedly these are imponderables, but they are worthy of deep thought.

What will the future hold? I am inclined to think that the answer to many of the Institute’s problems must lie in increased diversification. An active committee on aims and goals has come into operation. The question of the admission of members of disadvantaged communities has gripped the faculty’s attention, and an ad hoc committee presented a report to the president which resulted in a unanimous resolution by the admissions committee that an additional full-time admissions officer be appointed to deal with the problem.

Urged on by students, the faculty also grappled...
with the notion of admitting women undergraduates. The usual arguments were trotted out—that a Caltech education would be wasted on most women, who would only get married, raise children, and never make use of their special training; or, conversely, that it was positively medieval to discriminate against women. To its credit, the faculty voted overwhelmingly to urge the trustees to admit women to the undergraduate school with "all deliberate speed." The trustees eventually voted to admit girl undergraduates as freshmen and transfer students in the fall of 1970.

The public is probably willing to admit that students drink (providing they do so discreetly); it is not willing to make the same concession in regard to marijuana. And Caltech shares a drug problem with every other college in the country. Until early 1967, the Institute was inclined to draw a veil over the whole question. But then the editor of the California Tech determined to publish an expose of drug usage on the campus. He claimed to know that almost 30 percent of the undergraduates used marijuana and to have access to figures on the use of LSD. Before he published his story, however, he came to ask my advice. I pointed out that he hardly had very reliable evidence and that we were all aware of drug usage on the campus. I thought that in view of the fact that the newspaper received extensive attention beyond the confines of the campus it would be wiser not to publish the article. But I was unequivocal in declaring that it was not my decision but his in his capacity as editor of the paper. In retrospect I rather think the lad wanted to be forbidden to publish the story, for, after seeing me, he visited the director of publications, the dean of students, and finally the president—all of whom gave the young man much the same answer to his inquiries.

The article was published eventually, and a mild form of hell broke loose. The student government seized all copies of the Tech, and a recall campaign was mounted against the editor. Happily it failed. Through its board of directors the student body did establish a policy of greater control over the paper.

The administration was in something of a quandary. In the past we had tended to deal with drugs on an ad hoc and strictly sub rosa basis. Now, regardless of the accuracy of the article, it was publicly known that Caltech students smoked pot. It was decided to try to determine accurately what the situation was. A questionnaire was prepared, and the students were asked to complete it. Absolute anonymity was assured, and 90 percent of the combined graduate and undergraduate student body responded. The final tabulation of the results indicated that 86.3 percent of the entire student body had never used marijuana; 5 percent had tried it one or two times; and 8.7 percent had used it on three or more occasions. The undergraduate on-campus usage was less than half of the off-campus figure. Almost 91 percent of the undergraduates and 98.1 percent of the graduates had never used LSD. And even these figures, I would think, have now been reduced after the publicity concerning the adverse effects of LSD on the mind—the Caltech student's most valued asset.

The results of the survey prompted the president to appoint a faculty-student committee, ably chaired by the Institute psychologist, Dr. Kenneth Eells, to recommend an Institute policy on the use of drugs. The committee attempted to face the problem realistically and sympathetically, and the final report, Drugs and the Caltech Student, emphasized education rather than draconian retribution. That it was officially adopted by the board of trustees is a tribute to the good sense and patience of the committee, the president of the Institute, and of the trustees themselves.

In 1967 a most remarkable student was elected president of the student body. Joe Rhodes had emerged from a slum high school in Pittsburgh and had been admitted not only to Caltech but to MIT, Harvard, and the Juilliard School of Music (on a violin scholarship). Joe had real charisma and the ability to lead and influence others without being aggressive or particularly self-assertive. To make it possible for Joe to be their leader while he was only a sophomore, the Associated Students had to amend their constitution. This they did, and, having cleared the decks, they elected him president by an overwhelming margin. He was not only the first sophomore to become student body president, but he was also the first Negro in the history of Caltech to hold that office.

I am inclined to think that the answer to many of the Institute's problems must lie in increased diversification.
Joe immediately called a meeting of the entire student body, and faculty members were also invited. The assembled students passed several resolutions calling for reforms such as the presence of students on faculty committees. So discreetly did Joe and his colleagues handle this affair that the faculty welcomed their proposals, and no ill-feeling or any sort of confrontation developed.

During this period Joe and some of his friends were experiencing the kind of disillusionment and restless exasperation so common to modern American youth. They began to doubt the relevance of what they were learning and decided that they were unwilling, as the modern cliche puts it, "to postpone gratification." Out of their concern emerged the most responsible and innovative expression of student disenchantment and disaffection to be seen on any campus in the United States. Led by Joe, the Associated Students determined to undertake a research project on air pollution and to invite students from other campuses, both boys and girls, to work with them.

The faculty and administration of the Institute did not welcome the proposal with open arms. There was a tendency to judge the idea purely as a research proposal, when really it was both more and less than that. Happily, the faculty at least tolerated the plan, and, much to everyone's surprise, Joe was able to raise $70,000 from the Department of Health, Education and Welfare to finance the project. The Institute added about $30,000 in waiving overhead costs.

Throughout the summer of 1968, Caltech students and those from other campuses worked on the project, and, with an additional $50,000 that Joe gleaned from the Ford Foundation, some of the boys and girls have continued into the school year of 1968-69. Although the trustees had voted to bring girls to the Caltech campus in September 1970, the students had, in effect, already accomplished the task. Whether the research project makes significant technical contributions to solving the problem of air pollution may or may not be important, but the program is a great success regardless. It has been a triumph of student-directed self-education and interaction.

I have tried to keep pace with Joe Rhodes and his colleagues. Through a Master's Fund my office has attempted to make students more critical of their environment and to expand their horizons. As a first step I sent one student from each house on a tour of several other campuses—Harvard, Yale, Bowdoin, Rice, Wesleyan, Swarthmore, Amherst, and Williams. The students were impressed with what they saw, and their report, Reflections on Several Worlds, is already in its second printing. The report and influence of these seven students have helped chip away at the fortress of Institute complacency.

The Master's Fund has been put to many other uses. My office has sponsored sensitivity conferences, art classes, speed-reading instruction, faculty-student dinners, and theater performances, and has reimbursed students who attended concerts, plays, and other forms of entertainment. It has been the single greatest asset I have had for the proper execution of my duties.

Progress is slowly being made in many facets of undergraduate education at the Institute. The demands placed on students in their first two years at Caltech have been considerably reduced, and a real measure of flexibility and free choice has been introduced. Initiation in its old negative form is almost dead. This year (1968-69) for the first time we have introduced graduate students into all of the student houses, and a married couple now has charge of Dabney House.

But much yet remains to be done. The homogeneity of Caltech must be broken down. Plans for the increased admission of the disadvantaged must be formulated and implemented. Various different kinds of housing schemes should be available. Probably an experimental college should be created to deal with subjects other than science and engineering. Caltech is no longer so far ahead of other schools in the level of its undergraduate science education—it no longer so uniquely fills the kind of need it once did—that it is fair to ask a singularly attractive group of young people to make the kind of sacrifice demanded of them when they enter the cloisters of the California Institute of Technology.

I hope my words do not offend. If they do, let me make it perfectly clear that I write in this vein not because I don't think Caltech is a wonderful institution but rather because I am very much a part of the place and want to see it grow and prosper more than it ever has in its already illustrious history.

I cherish a great number of memories of my years as Master of the Student Houses, but above all I remember with warmth and deep affection several generations of Caltech undergraduates with whom it has been a great joy to work. They made it all worthwhile.
Epilogue

Robert Huttenback got a rousing farewell in February as he set off on a six-month leave to do historical research in England and ended his 11-year career as Caltech's Master of Student Houses. He returns next fall as Dean of Students.

Hundreds of undergraduates and other Genial Abbot fans paraded around the campus with their former Master, three bagpipers, Mrs. Huttenback, and an elephant named Margie. On the steps of Millikan Library, amid a shower of balloons, speeches, and gifts, the marchers toasted the old master with tankards of ale, while Margie drank hers from the Millikan fountain.