communicating the more public of human experiences," while the main concern of literature, he said, "is with man's more private experiences" and with the interactions between these private worlds and the public universes of "objective reality." Have we here a basis of distinction between the "two cultures"? But, as Huxley points out, both science and literature describe man, and the same man, and his identical activities. How, if at all, are these descriptions to be reconciled? How are we to harmonize "our private and unshareable experiences with the scientific hypotheses in terms in which they are explained"? I said earlier that science concentrates on the generic at the expense of the individual. Let me in conclusion carry this idea a little further. Science is not primarily concerned with the uniqueness of events but with what they have in common with other events, so that it can explain their uniqueness in terms of general principles. Literature, art, and history, on the other hand, are chiefly concerned with unique human experiences and events, and even though they use public terms in their attempts to communicate those experiences, or general principles to try to explain them, there is always a unique element in their subject matter which is irreducible and inescapable. It is when science studies man himself that the tension between these two modes of understanding becomes acute.

Perhaps we cannot at present escape from the polarity between the public scientific description and the private world. Perhaps, indeed, at our present stage of knowledge the tension between them is itself a condition of development; as William Blake said, "without contraries is no progression"—an intuitive anticipation of Darwin. But if we *are* to progress toward a unified culture it must be through a mutual understanding, to which scientists have much to contribute.

References

1. P. Stubbs, *New Scientist* **24**, 448 (1964).
2. H. Florey, *ibid.*, p. 639.
3. Lord Brain, *Brain* **86**, 381 (1963).
4. D. M. MacKay, in *Man and His Future*, G. Wolstenholme, Ed. (Churchill, London, 1963), p. 181.
5. A. Huxley, *Literature and Science* (Harper, New York, 1963).
6. J. Bronowski, *Science and Human Values* (Hutchinson, London, 1961), p. 55.

NEWS AND COMMENT

Crisis at Berkeley: (I) The Civil War

Berkeley. For nearly 7 months the University of California has been enmeshed in a crisis that may ultimately be recorded as one of the crucial episodes in the development of American higher education. The situation at Berkeley is so complex—and so much of it is unresolved—that any account of it at this point in history is unavoidably going to be incomplete. For the 3-week visitor there is the special problem that there is no such creature as an unbiased observer at Berkeley, unless it is Ludwig, the large black dog who habitually sits in the fountain opposite Sproul Hall. Few people remain sufficiently detached to comment with objectivity on the events around them; already there are "schools" and "counter-schools" and so many papers, articles, studies, and interpretations of the Berkeley events that it would not be surprising to see an interdisciplinary course on the uprising added to the University curriculum. But the situation is worth looking at despite the obstacles because the events at Berkeley are certain to have great significance, not only for the University of California but for the future of higher education throughout the United States.

At this stage, the problems appear to fall into two main categories. Internally, Berkeley seems adrift and disoriented. The events of the fall were an upheaval perhaps unmatched on any major American campus in the 20th century, and they left their marks on the people as well as on the institution. Faculty, administration, and students were all called upon to play unaccustomed roles. But while traditional relationships within the university community have been overturned, formulas for a new distribution of power and responsibility have not yet been found. The result is an instability continually edging over into chaos.

Exacerbating the internal crisis is what appears to be a rising tension between the campus community and the citizens of California, who pay many of its bills. The antagonism centers chiefly on the students, but drifts over into suspicion of the faculty and administration as well. Since the demonstrations against the House Un-American Activities Committee in 1960, Berkeley students have become increasingly political. In the past few years they have been involved in civil rights campaigns not only in Mississippi and Alabama but against the allegedly discriminatory policies of some of the University's neighbors—businesses in the Oakland–San Francisco area. Whether adult Californians approve of their objectives is an open question: the defeat of the fair-housing proposition on California's ballot last fall would suggest that perhaps they don't. But there is no doubt that many are affronted by the students' tactics, ingenious variations on the theme of civil disobedience, running from the now-standard sit-ins to "shop-ins" (at local groceries), "sleep-ins" (at a San Francisco hotel) and "lie-ins" (in an automobile showroom.) When civil disobedience was applied against the university itself during the disorders last fall, the latent public impulse to retaliation seems to have blossomed. And in March, when a handful of students became involved in an obscenity controversy which featured signs, speeches, and literary readings containing the world's most famous four-letter word, all restraints were ended. Public pressure and criticism became so intense, the internal situation so turbulent, that President Clark Kerr and Acting Chancellor Martin Meyerson (former

dean of the College of Environmental Design) resigned, adding to the confusion. Subsequently, their resignations were withdrawn. But the truce is plainly temporary.

Increasing pressure from the legislature, the public, and the Board of Regents (an appointed body that has final responsibility for nearly every phase of university affairs) threatens the university in ways so serious they can hardly be overestimated. The constitutional autonomy that has made the university more independent of state politics than almost any other publicly controlled university in the country may be reconsidered by the legislature. Fiscal support, as reflected both in state appropriations and in private contributions, may be in jeopardy. Further, the constant reminder that the university is, in fact, a creature of the state is harmful to morale of administrators, faculty, and students alike. Left alone, the university community might work out fruitful solutions to some of its painful problems. But as the university gropes toward an internally satisfying redefinition, it appears to move further from the outsiders who have ultimate control over both its policies and its pocketbook. Repeated interference by the Regents continually brings home the message that the institution is not master of its own fate. Where it will all end is far from clear. But unless an accommodation is rapidly established, the present preeminence of the University of California is unlikely to continue.

What Is Free Speech?

To begin with, it is important to stress that the Berkeley uprising was primarily a movement of students and not (as has been charged) a movement led by outside agitators or professional revolutionaries engaged in some left-wing plot against the university. Not only were almost all leaders and all but a small fraction of the movement's most active followers students enrolled at Berkeley, they were among its better students. (Half the undergraduates arrested during the climactic episode of the semester-long turmoil—the occupation by over 1000 students of the chief Berkeley administration building in December—had academic averages of B or higher.) And they were involved in an issue that directly affected their political freedom.

Many people have thought there was "freedom of speech" at the University of California before; at Berkeley there was certainly an incredible amount of political activity and discussion. But discussion was circumscribed by a variety of restrictions, both bureaucratic and substantive. And, more important, campus regulations forbade students from advocating or supporting off-campus political or social action, a ban which impeded not only attempts to organize picket lines or sit-ins but campaigning for Barry Goldwater or Lyndon Johnson as well. There was one exception—a small strip of land outside the main entrance to the campus, which everyone had always assumed belonged to the City of Berkeley—and it was here that student political activity was traditionally concentrated. When the administration announced early in September that the property in question in fact belonged to the university and would henceforth come under the ban (effectively ending all student political activity) the students became enraged. Faced with curtailment of their varied activities, students representing all shades of political opinion mobilized into the "united front" which soon became rechristened the Free Speech Movement (FSM). And their demands quickly widened to include not just a reinstitution of their traditional rights but the abolition of all university regulation of student political conduct throughout the campus. The FSM also demanded student participation in administrative decisions affecting their interests.

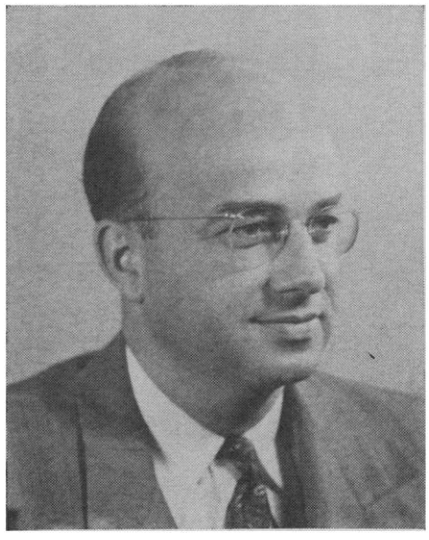
To say that the individuals involved were good students who had a good issue is to say very little about the real character of the Berkeley rebellion. Berkeley students are not the well-scrubbed cherubs of the all-American dream. Those to whom beards, sandals, and untucked shirts are certain emblems of moral anarchy will find the stuff for many a nightmare on the Berkeley campus. But it is more than a question of personal style. Berkeley students are in the vanguard of a wave of student radicalism more intense than anything seen on American campuses since the 1930's. There are, among the students and their off-campus associates, radicals of the traditional sort—descendants, literal and spiritual, of the Communists and socialists of the 1930's—and these played a role in the unrest, along with campus conservatives. The characteristic radicalism of the 1960's, however, is not so much ideological as it is tactical. The students' aims—freedom, justice, equality—are goals to which almost all Americans pay respects. It is their readiness to use civil disobedience to achieve these aims, and their moral certainty, that make the students distinctive. The real "fink," in campus parlance, is not the conservative opposed to change but the middle-class liberal unwilling to risk disorder for the sake of objectives he claims to share. The administration thought of itself throughout the crisis as patient, benevolent, even democratic, and found the students, as one official described them, "victims of a moral superiority complex." But to the students any attempt to compromise with what they regarded as an intrinsically immoral position was a hypocritical "sellout." Anything less than total victory was unacceptable.

The two major instances of civil disobedience have been well publicized. The first occurred in early October when the administration ordered the arrest of an individual "illegally" soliciting funds for a civil rights group as part of a widespread student test of the administration's will to hold to its rules. A group of students ultimately numbering 4000 surrounded the police car holding the arrested man, and did not disperse for over 24 hours. The second instance—the day-long sit-in in Sproul Hall—was provoked by the administration's refusal to drop charges belatedly brought against the leaders of the October demonstration. It was ended by the intervention of 600 armed troopers (called out by California Governor Brown), who spent 12 hours arresting and removing the demonstrating students and taking them to jail, while thousands of other students and faculty members watched from outside.

The Strike

Less publicized but in many ways more important than the sit-in was the student strike which followed it. The strike was organized by graduate teaching assistants, and, though no numbers are entirely trustworthy, it appears to have had the support of enough undergraduates and faculty members to bring between 60 and 85 percent of Berkeley's classes to a halt for 2 days.

As fervor for the FSM rose, the regular undergraduate student government was virtually eclipsed. Unlike the formal student Senate, the FSM made no distinction betwen graduates and undergraduates. Graduate students, whose connections with campus affairs had be-



Clark Kerr

Martin Meyerson

come rather remote, found themselves playing an important role. A union of graduate teaching and research assistants, affiliated with the American Federation of Teachers, is one of the most significant results of the fall's events. The union, which has roughly 500 members, is preparing to negotiate with faculty departments on a wide range of bread-and-butter issues affecting working conditions, and may continue action on political fronts as well. Another symptom of reviving graduate political interests was the formation of a federation of graduates representing all departments. This group, known as the Graduate Coordinating Committee, is attempting to reenter campus government, which in recent years has been the province of undergraduates alone.

What were the students' motivations? No generalization can cover all the possibilities, but it appears that, for a majority of them, the major motive was political: they were affronted at the administration's denial of what they felt were their political rights, and frustrated by its refusal to treat their demands seriously. A survey conducted in November by Dr. Robert H. Somers of the sociology department suggests that about two-thirds of the student body of roughly 27,000 supported the goals of the FSM and one-third approved even its tactics.

How much the revolt fed also on student malaise at being the neglected part of what President Kerr has called the "multiversity" is very unclear. Much of the rhetoric of the FSM draws on the complaints of facelessness, impersonality, and "alienation." When the students were occupying Sproul Hall, FSM leader Mario Savio is said to have stood on the steps with a megaphone calling out to passersby, "The administration wants you to walk by like a machine. Come inside and act like a man." The metaphor of the machine was very popular. Students walked around with IBM cards pinned to their lapels. A small but articulate segment of the FSM mingled its demands for political change with proposals for educational reform within the university, and there emerged from the strike a shadow institution known as the Free University of California, which held classes and lectures after hours on subjects of special interest to the students. But despite these omens, and the subjective impressions of many observers, there is little real evidence that the majority of students who became active or passive supporters of the FSM felt hostile to the multiversity. The survey cited above found essentially unanimous agreement with the statement, "Although some people don't think so, the President of this University and the Chancellor are really trying very hard to provide top-quality educational experience for students here," and only 17 percent of the students interviewed indicated dissatisfaction with the university's courses, professors, and examinations. Further, there was no significant correlation between the degree of dissatisfaction and the degree of commitment to FSM. Somers concluded that, "while it is impossible to assert that impersonality and bureaucracy at the University have not had an *indirect* influence . . . [the] data do not suggest that dissatisfaction with the educational process played any role at all." He believes that resentment against the deprivation of political rights far outweighed the "multiversity" in galvanizing student support.

There is further evidence for this conclusion. The words "educational reform" are on everyone's lips. Plans are well under way for an experimental undergraduate college to begin operating on the campus. Many professors, and many students, are talking about restyling the curriculum. But the reform movement arouses nowhere near the intensity or the numbers that the Free Speech Movement did. Recently, a well-publicized meeting was held to discuss educational reform. Chancellor Meyerson, one of the comparatively few people with a genuine interest in the subject, had agreed to talk with interested students and faculty, listening to their ideas and answering their questions. A large ballroom was reserved for the occasion. But less than 100 people showed up. The FSM rallies drew thousands.

Faculty Politics

If generalizations about the students are risky, generalizations about the faculty are impossible. About the only safe one, in fact, is that a majority of the faculty became so involved in the Free Speech crisis and again during the crisis over the resignations that relatively little scholarly work was done. Someday someone will produce a study comparing the output of Berkeley professors in 1964–65 with their output in another year, and it will undoubtedly show a severe drop. There are already two pieces of evidence. The data-processing center which services many faculty research projects was so neglected during the fall that it is reported to have been threatened with financial difficulties. Professors repeatedly complain that they "haven't been in the lab since October," and express considerable anxiety about returning to their work. Among the social scientists the crisis was not quite so serious: many felt themselves in a kind of laboratory of revolution with real significance for their own work and experience. In the natural sciences, however, the events were more disruptive. "There are two enemies of scientific work," one outsider commented, "dis-

traction and adrenalin." Both were in easy supply around Berkeley.

The degree of faculty involvement generally paralleled the lines of involvement among the students. Within the professional schools, including engineering, commitment to the FSM was comparatively rare. The same is true of the College of Chemistry (an independent entity at Berkeley with a somewhat professional orientation), which is reported to have made it clear that teaching assistants who failed to show up for classes would lose their jobs. Within the College of Letters and Science, however, support for FSM was far more common. Different departments reacted differently—and the distinctions will ultimately be sorted out by some doctoral candidate in sociology —but there was in general a widespread tendency to support and even encourage the students in their rebellion against the administration. Professors in large numbers dismissed classes themselves, refused to penalize their striking teaching assistants, or transformed whatever classes were held into political forums for discussion of the crisis. There were some exceptions—some of the university laboratories, on the campus and in the Berkeley hills, tended to show little enthusiasm for what was going on. The math department, on the other hand, struck many observers as conspicuously more "radical" than most other departments. One theory, proposed by a molecular biologist and seconded by several members of science departments, is that individuals in fields in which, as he put it, "more is going on" tended to be more sympathetic to the FSM than some representatives of more traditional disciplines.

Formally, the faculty took two lines of action. The first—an attempt by a group of department chairmen to mediate between Kerr and the students after the sit-in—was a fiasco. The second was more significant. At a special meeting of the Academic Senate on 8 December, the faculty as a whole endorsed the students' demands by a vote of 824 to 115. The resolution asserted that the university should end all but minimum restriction of student political activity; that off-campus political action should be beyond the province of university discipline; that students involved in the strike and sit-in should not be punished; and that future decisions on student political conduct should be handled by a faculty committee responsible to the Academic Senate, not to the chancellor. The administration and the Regents tentatively accepted all but the last of these points, and it was the decisive factor in restoring the campus to a temporary peace.

The faculty's action has been differently interpreted by various members. Many, particularly those who voted with the minority, feel that their colleagues were stampeded by fear into a position which overturns the traditional authority of a university to make rules affecting the character of its own community. Others have felt that the faculty acted irresponsibly, out of pique at the administration. Most, however, feel the faculty was moved by genuine conviction that the administration's position was not only ill advised but morally indefensible. There has been little sentiment for reversing the action.

More important than the faculty's formal action is the informal transformation that began with it and is still going on. The transformation is, first of all, personal. Older relationships have by no means been completely altered—older professors, department chairmen, and other traditional campus leaders are still treated with the respect to which their intellectual attainments, personal distinction, or age entitles them. But there is a tendency to judge people in new ways, not only on their political position (as tested in the crisis) but on their ability to make speeches to crowds of students, their skill in mobilizing support from the faculty, their finesse in negotiations behind the scenes. Regardless of age, department, or seniority, the individuals who combined these qualities with concern for what was going on around them came swiftly into new positions of authority.

On a personal level this has meant new friendships between professors who formerly had scarcely heard of each other's fields, let alone names. On a political level it has been even more significant. The old structure of faculty committees is still in existence, but it has been supplemented by a variety of emergency committees which are expected to work in a more or less representative capacity. The most important of these, a six-member group called the Emergency Executive Committee, actually functions as a kind of emergency cabinet, with wide powers to act for the faculty in sudden crises.

Several articles on the events at Berkeley written by members of the faculty have found their way into popular journals. Among these are:

Lewis Feuer, "Rebellion at Berkeley," *New Leader*, 21 December 1965, with replies by Paul Jacobs and Stephan Weissman, 4 January 1965, and by Clark Kerr, 18 January 1965.

Nathan Glazer, "What happened at Berkeley," *Commentary*, February 1965, with reply by Philip Selznick, March 1965.

Seymour Martin Lipset and Paul Seabury, "The lesson of Berkeley," *Reporter*, 28 January 1965.

Sheldon S. Wolin and John Schaar, "Berkeley and the fate of the multiversity," *New York Review of Books*, 11 March 1965, with reply by Clark Kerr, 8 April 1965.

Several articles written by outsiders are also of interest. These include:

James Cass, "What happened at Berkeley," *Saturday Review*, 16 January 1965.

A. H. Raskin, "The Berkeley affair: Mr. Kerr vs. Mr. Savio & Co.," *New York Times Magazine*, 14 February 1965.

Calvin Trillin, "Letter from Berkeley," *New Yorker*, 13 March 1965.

The alumni magazine, *California Monthly*, devoted its entire February 1965 issue to a discussion of the fall unrest; the issue contains an excellent chronology of what took place. It is available from Alumni House, University of California, Berkeley, for 60 cents.

Supporting the new structure is an array of faculty cabals that might almost be described as incipient political parties. The most notable of these is a sizable liberal bloc organized into an informal caucus known as "the 200." This group, which played an important role in the passage of the December resolution, sprang into action again after Kerr and Meyerson resigned. It was influential in formulating a guarded request for them to stay on and in engineering its passage through the Senate.

Two other factions, which are generally referred to as "conservative" and "moderate," are also at work. The conservatives appear to be a small minority who opposed the December resolution and who feel Kerr should have taken swift disciplinary action against the students. While not particularly influential with the faculty as a whole, these men, some of whom appear to have independent connections with the Regents and state legislators and are believed to be working behind the scenes for Kerr's ouster. The "moderates" were less enthusiastic about the December resolution and generally more enthusiastic about Kerr than either the liberals or the conservatives. Some representatives of the moderates negotiated with representatives of "the 200" in developing the endorsement for Meyerson and Kerr in March.

Administrative Grievances

Underlying the resurgence of faculty politics was the almost total collapse of the administration at Berkeley, signified by its spectacular failure to deal effectively with the students. There are two "administrations" at Berkeley, the campus authority represented by the chancellor and the statewide authority represented by the president. In theory the president is supposed to devote himself to the problems of the mammoth statewide system and stay relatively uninvolved in the day-to-day operations of the nine campuses. In practice, however, the relations between Berkeley and the statewide officers have always been uniquely close, partly because the administrative offices are physically adjacent to the Berkeley campus, partly because until 1952 the university president also acted as chancellor at Berkeley. In Kerr's case, this relationship was reinforced in two ways. First, there were personal ties—he had been an influential member of the Berkeley faculty and served as Berkeley chancellor for 6 years before becoming president in 1958. And, second, the Berkeley chancellor, Edward Strong (a philosophy professor who was a top administrator of the radiation laboratory at Berkeley during World War II) is reported to have been progressively isolated from the Berkeley community during the crisis and unable to lead the campus effectively himself. Why this is so is unclear: where the responsibility for the fiasco really lies will undoubtedly be debated at Berkeley till doomsday. But, in any event, much of the blame was attributed to Strong, and this left Kerr increasingly responsible for managing the Berkeley campus. (Strong was replaced by the Board of Regents in January, and resigned formally in March.) Alarm at the form Kerr's management was taking soon combined with a variety of other grievances to produce a degree of faculty-administration estrangement overwhelmingly exceeding what is usually endemic to such relationships.

The faculty is irritated by the administration's plans for a calendar reform that would replace the present semester system by a quarter system in order to bring about a state unhappily referred to as "year-round operation of the plant." The administration is acting at the behest of the legislature, and has been supported by the Regents, who have just turned down a faculty request for postponement. But the faculty feels it has been inadequately consulted about a project which not only involves enormous work revising courses but which some feel may interfere with more serious efforts to promote curriculum reform. There is some tension as Berkeley, historically the favored campus of the university, tries to integrate into a growing statewide system and as the campus reaches the end of a period of rapid growth dictated by the state's master plan. President Kerr referred to this obliquely when he hinted that the resolution of 8 December (to which he was in some measure unsympathetic) could be partly explained by Berkeley's jealousy of the other campuses—a remark which infuriated the faculty. (There was wry amusement when the alumni magazine underscored the change in Berkeley's status by opening its factual article on the crisis, "The semester began almost as inconspicuously as any other—with President Clark Kerr in Tokyo dedicating the latest center in the university's Education Abroad Program.") There is resentment against what many faculty members believe is a tendency of the administration to play one campus against another for its own purposes. And there are increasing complaints as the seemingly unstoppable growth of the bureaucracy makes life more cumbersome for the individuals within it.

Political differences also separate Kerr from the Berkeley faculty. How deep the feelings are, or how high the numbers, it is difficult to judge. But there appear to be significant numbers of faculty members who feel that Kerr has consistently and unjustifiably taken credit for the general liberalization of campus political activity that has accompanied the waning of McCarthyism, and that in his response to a variety of campus issues he has shown himself to be not a liberal at all. He is criticized particularly for his handling of a recent case involving academic freedom, for his failure to defend individual faculty members publicly when they were attacked by members of the state legislature, and for a statement in which he alleged that "Maoist" and "Castroist" elements had been involved in the student uprising. Some faculty also resent the rather unflattering view of faculty character and aspirations implied by certain passages in Kerr's recent book, *The Uses of the University*. At the other end of the political spectrum is a considerably smaller group of faculty conservatives who opposed some of the liberal innovations when they occurred and are distressed by their extension under pressure from the FSM. Differences between these groups, together with its other difficulties, leave the university facing its external antagonists extremely confused and divided.

—ELINOR LANGER

(A second article will discuss the deepening crisis touched off by the obscenity issue and the increasing pressures on the university from outside.)

Education: Scholars Organize a National Academy Intended To Advance Educational Scholarship

Establishment has been announced of a National Academy of Education, which its founders hope will parallel in prestige the National Academy of Sciences, but which will not have the quasi-governmental status of NAS.

In announcing formation of the academy, its first president, Ralph W. Tyler, director of the Center for Ad-