

## Book Reviews

**The Development of Academic Freedom in the United States.** Richard Hofstadter and Walter Metzger. Columbia University Press, New York, 1955. xvi + 527 pp. \$5.50.

**Academic Freedom in Our Time.** Robert M. MacIver. Columbia University Press, New York, 1955. xiv + 329 pp. \$4.

The freedom of science and the academic freedom of the university professor are closely interwoven strands in the fabric of our cultural history. From the disappearance of the independent natural philosophers of the 17th century and until the spread of modern scientific research into the nonacademic laboratories of the government and major industries, nearly all science was fostered in the developing colleges and universities of Europe and America. To the scientist, academic freedom thus embraces his personal freedom as a scientist to work on problems of his own choosing, to follow the threads of investigation wherever they may lead, and to publish with impunity the results of his studies, even if they should offend local pride or interest.

This freedom, the very breath of life to science, the scientist must recognize as equally vital in all other fields of scholarly work. In times past it has often been proved, and will inevitably continue to be proved in the future, that the loss of freedom by his colleagues in the humanistic or social studies imperils the freedom of the scientist, even as the loss of the scientist's freedom has catalyzed the loss of academic freedom on a broader scale.

The story of academic freedom recounted in these two volumes consequently has much to say of the freedom of science—from the time of the 14th and 15th centuries, when humanism became a threat to academic vested interests and the Copernican doctrines became a threat to religious dogma, to the time of World War I, when the noted psychologist and founder of *Science*, J. McKeen Cattell, was discharged by Columbia University because he sent a petition to three Congressmen urging them not to approve a bill that would sanction the use of American draftees on the European battlefields; and further, to the

still more recent times of Communist alarms and the American quest for security, when disclaimer oaths, Congressional investigations, and public hysteria have shattered the academic freedom of scientists and all other scholars alike.

The first of the two volumes is essentially historical in character. The second is a polemical argument that in the face of recent events cries out like the *Areopagitica* for an enlightened understanding of the meaning and importance of certain liberties. The first volume, by two authors, manages better than most products of multiple hands to achieve not only a unity of viewpoint but even a certain unity of style. Even so, the coordination has not been perfect; and there is an extended part of Metzger's first chapter on "The old regime and the educational revolution" that, instead of analyzing the educational revolution of the years 1865 to 1900, verges on a purely descriptive treatment of "The old-time college (1800–1860)," although that had already been excellently handled by Hofstadter in the final chapter of part 1. Yet this defect may gladly be overlooked in noting the merits of the book: its solid scholarship, its careful effort to avoid bias, and its due attention to the complex aspects of the origin and growth of our American colleges and universities and to the relative state of academic freedom within them. The much briefer volume by MacIver deals with a still unfinished chapter of our history. Its analysis is not as objective, as indeed befits the thought of a warrior in defense of cherished values. Yet where the first volume for the most part dispassionately instructs, the second often stirs the blood. Its call to action should arouse many a sleeping champion of the freedom of the mind.

Richard Hofstadter, author of the first part of *The Development of Academic Freedom in the United States*, devotes a profoundly interesting introductory chapter to "The European heritage," the story of the rise of the great European universities and their early struggles to secure freedom of mind and freedom of instruction in opposition to the bounds of religious dogma and authority. Slowly the idea of toleration, even for the views of heretics, made way, although in the early

stages of the foundation of colleges in this hemisphere sectarianism set rigid limits. Through four succeeding chapters, dealing respectively with the early days of Harvard College and the emergence of Harvard liberalism, with the other colonial colleges, with the struggles of sectarianism and secularization, and finally with the great retrogression of learning in the colleges of 1800–1860, Hofstadter traces the development of the American system of a lay government by boards of trustees and the dawn of the idea of academic freedom.

Of particular interest to scientists of today will be the last section, where it is shown how "the modern idea of academic freedom has been profoundly affected by the professional character of the scholar, by the research function and scientific conceptions of the search for truth, and by the manifold services, aside from teaching students, that are rendered to the community by the great university." Among the notable cases of this period is that of Wolcott Gibbs, one of America's great chemists of the time, who was rejected for appointment to a professorship at Columbia University in 1853 because of his Unitarianism, which in that day was still the subject of fierce religious prejudice in many quarters. Gibbs' rejection was in spite of a provision in the Columbia charter that forbade religious tests for trustees or officers; and it led Samuel B. Ruggles, a trustee of the minority group who favored the appointment, to make a public reply that greatly advanced academic freedom and led to the reform of Columbia University. "It is hardly an exaggeration," says Hofstadter, "to say that Columbia University arose out of the case."

In Walter P. Metzger's portion of the book, the part that is of especial interest to scientists is the chapter that discusses the relationship of Darwinism to the freedom of instruction in the colleges. The American university, in the true sense, from its foundation rested on the twin pillars of the evolutionary controversy and the transplantation to America of the *Lernfreiheit* and *Lehrfreiheit* of the great German universities of the 19th century. Thus Daniel Coit Gilman, who became the first president of the first American university at the graduate level, Johns Hopkins University, appointed Newell Martin, a disciple of Thomas Henry Huxley, as professor of biology, and invited Huxley himself to speak at the university's opening ceremonies. The incompetence of the clergy to speak in matters of science was the obverse of the judicial competence of the scientist to speak authoritatively not only in regard to scientific fact and theory, but also to serve as the sole fit judge of the competence of his scientific colleagues. The growth of this concept has led to an im-

portant development in the matter of academic tenure: the right of any university teacher to be judged for competence and fitness to teach exclusively by his peers.

The German influence, also, was clearly evident in the founding of Johns Hopkins University, which was called "the Göttingen at Baltimore." It was there that the German conception of a university as a research institution devoted to the extension of knowledge, even more than to the transmission of knowledge, was first introduced into American higher education. And it was no accident that, with such antecedents, it was from the Hopkins, much later on, in the days not long before the United States entered World War I, that the invitation went out to nine other leading universities to help in the founding of the American Association of University Professors. The latter-day history of academic freedom in this country is chiefly the history of that organization's successful efforts to codify the principles of academic freedom and tenure and, after bitter initial opposition from trustees and administrators, eventually to achieve agreement with them in the maintenance of good standards; and the history also of the same organization's less successful efforts to mediate disputes between faculty members and administrative officers and, in cases of flagrant violation of the established principles, to investigate the cases and to censure the guilty administrations.

In the years before World War I, the struggle for academic freedom shifted from its focus around the evolutionist to one centered on the economist and sociologist, in measure as the vehemence of public opinion about the evolutionary philosophy was mitigated and the role of big business in the endowment and trustee management of American colleges and universities increased. World War I shifted the area of struggle to focus on the pacifist and the professor of German extraction—a grim story lightened only by the magnificent gesture of Harvard University in refusing a \$10 million bequest carrying a stipulation that the openly pro-German professor Hugo Münsterberg be dismissed from his post. It is interesting that during World War II there were virtually no infringements of academic freedom of the sort that blemish the history of our universities during World War I. Yet the struggle for the maintenance of academic freedom and the tenure provisions upon which it depends was by no means won. With the quest of the American people for security in the disillusionment, hysterical fear, and suspicion of the Cold War, threats of ever greater magnitude arose to imperil academic freedom.

This most recent chapter of the history of the subject is in part related in MacIver's book, which successively considers

"The climate of opinion," "Academic government and academic freedom," "The lines of attack on academic freedom," "The student and the teacher," and "The university and the social order." But as these chapter headings show, MacIver is chiefly concerned with causes and relationships, with trends and general principles. The actual history of these recent episodes is only now being recounted by the American Association of University Professors, which has asked a Special Committee (under my chairmanship) to survey all the cases arising from the national quest for security and to report on them. Beginning with the famous University of Washington "Communist" cases and the dismissals of the nonsigners of the disclaimer oath instituted by the Regents of the University of California, the roll is a lengthy one.

What is of more importance than the judgments rendered in the individual cases of those scientists and nonscientists involved is the formulation of new principles around which the guardians of academic freedom can rally. Perhaps in time, though bitterly opposed by many at first, these principles will come to be accepted by administrative officers and faculty members alike, to stand alongside the 1940 principles as the voice of wisdom in the right regulation of universities and the maintenance of freedom of thought and instruction among scholars and research workers. Having weathered the storm of suspicions, accusations, and investigations, the freedom of the mind that tolerates sharp differences of opinion and encourages criticism—the freedom of the mind that has its stronghold in our universities—will continue in the spirit of John Milton, Thomas Jefferson, and John Stuart Mill, to serve our people infinitely better than the repressed and constrained thought of those who are subject to the bonds of authority.

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**Soviet Professional Manpower, Its Education, Training, and Supply.** Nicholas DeWitt. National Science Foundation, Washington, 1955 (Order from: Supt. of Documents, Washington 25). xxvii + 400 pp. \$1.25.

This book reports the results of a comprehensive study of the entire Soviet educational system, with particular emphasis on the training of scientists and engineers. It is based on a large volume of statistical data and descriptive reports from a wide range of sources, and with considerable variation in degree of reliability. The author discusses at some length the difficulties encountered in interpreting and combining available data, which he presents in 45 tables and 11 charts.

Despite these difficulties, this volume is probably the most complete and searching study thus far made of the Soviet educational system, and it seems likely to remain the standard work in the field for some time to come.

Public education is a central purpose of the Soviet Union, but it is based on the needs and desires of the State rather than of the individual. It is interesting to note that, in contrast to the current serious shortage of teachers in the United States, the student-teacher ratio in Soviet schools was reduced from 28 to 1 in 1940 to 23 to 1 in 1950. Furthermore, about 42 percent of Soviet professionals were trained for, and are employed in, the field of education.

Despite the emphasis on education, educational opportunities in the Soviet Union are generally much more limited than in the United States. Soviet higher educational institutions have graduated only half as many persons during the past 25 years as have the higher educational institutions in the United States. However, by sacrificing the humanities and the liberal arts, the Soviets manage with a smaller educational base to turn out a higher number of trained specialists than does the United States.

Throughout the system, a heavy emphasis is placed on technology and basic science. In the elementary grades 1 to 4, inclusive, about 28 percent of the subjects studied are in the fields of mathematics and science. In the intermediate grades, more than one-third of the time is spent on such subjects, and in the secondary school more than 40 percent. The result is that *all* high school graduates have substantial training in and familiarity with physics, chemistry, mathematics, and the earth sciences.

The emphasis on science and technology is reflected not merely in the curriculum, but in various selective devices that tend to channel the ablest youth into the technological branches. Twenty-seven percent of the 2 million professionals in the U.S.S.R. are in engineering and related fields, 16 percent in health fields, 9 percent in agricultural fields, and only 6 percent in all socioeconomic service fields. A similar situation obtains with respect to semiprofessionals.

The Soviet Union is graduating almost twice as many technical specialists in certain fields as is the United States. Between 1928 and 1954, the Soviet Union graduated about 682,000 professionals in engineering as against 480,000 in the United States during roughly the same period. Agricultural graduates in the Soviet Union totaled about 244,000 as against 133,000 in the United States. Soviet graduates in medicine outnumbered those in the United States more than two to one, 320,000 against 148,000.

The Soviets place a much heavier emphasis than does the United States on