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Oct. 14, 1962

New York Herald Tribune Sunday, Octo

# No Room for Einstein in America?

By Fred C. Shapiro
*Of The Herald Tribune Staff*

Somewhere in the land to which he gave so much, there should be room for a memorial to Albert Einstein.

But because, in the 3,628-,130 square miles of America, none has been made available, the last sculpture posed for by the father of atomic science is about to be turned out of the land he loved, and sent to Germany—the land he fled.

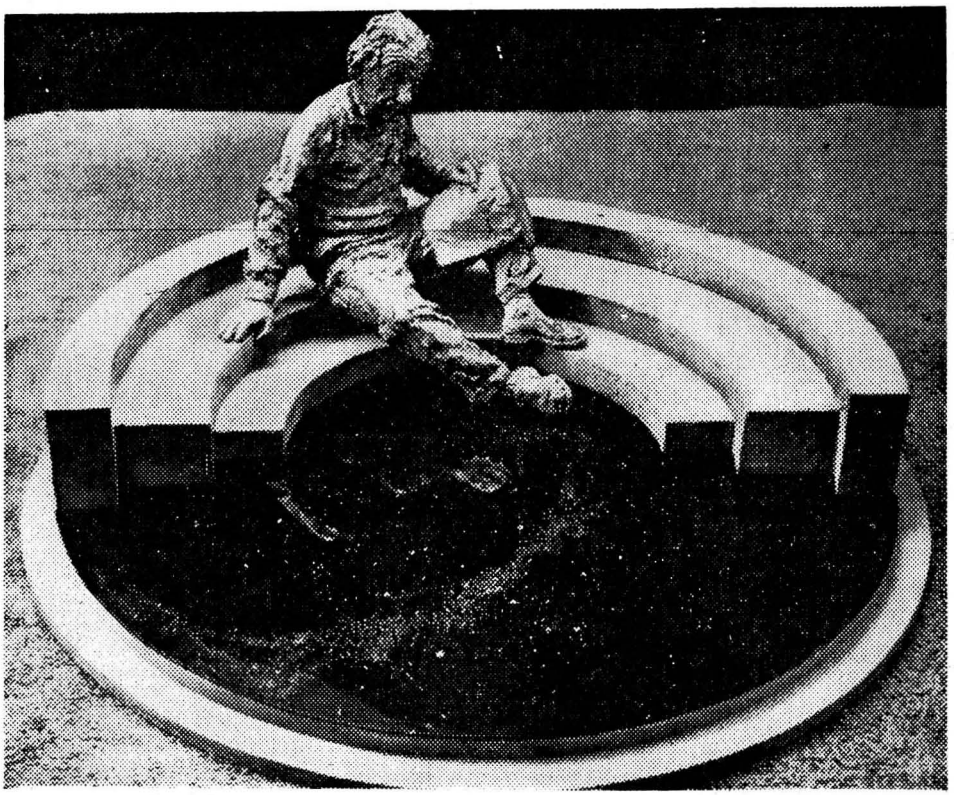
An offer by a West German group to put up the memorial created by Robert Berks is still open. And Mr. Berks, disappointed repeatedly in a nine-year quest for a sponsor, is about to accept.

What is needed in America is enough room suitably to display the 21-foot disc memorial, and $180,000 to match the German offer.

"I've had a fantastic history of near misses," Mr. Berks said yesterday at his studio at 162 E. 92d St. "At Princeton President (Robert F.) Goheen said he wanted to have it in Princeton, but Dr. (Robert) Oppenheimer, of the Institute of Advanced Studies (where Einstein lived and worked) said Einstein was "Too big for just a piece of sculpture.'"

In Israel, the land of the exile, the sculpture almost caused a government crisis, Mr. Berks said. A subscription was raised to erect the memorial, but because of the Orthodox Jewish prohibition against graven images, the fund was not completed.

Mr. Berks got a chance to model Einstein after winning the international competition sponsored by Israel and the Chaim Weizmann Institute for the best sculpture of the first president of Israel.



**A MEMORIAL IN EXILE**—The Albert Einstein sculpture for which the artist, Robert Berks, has been seeking an American home for nine years. Since none has been found, the sculpture may go to a West German group.

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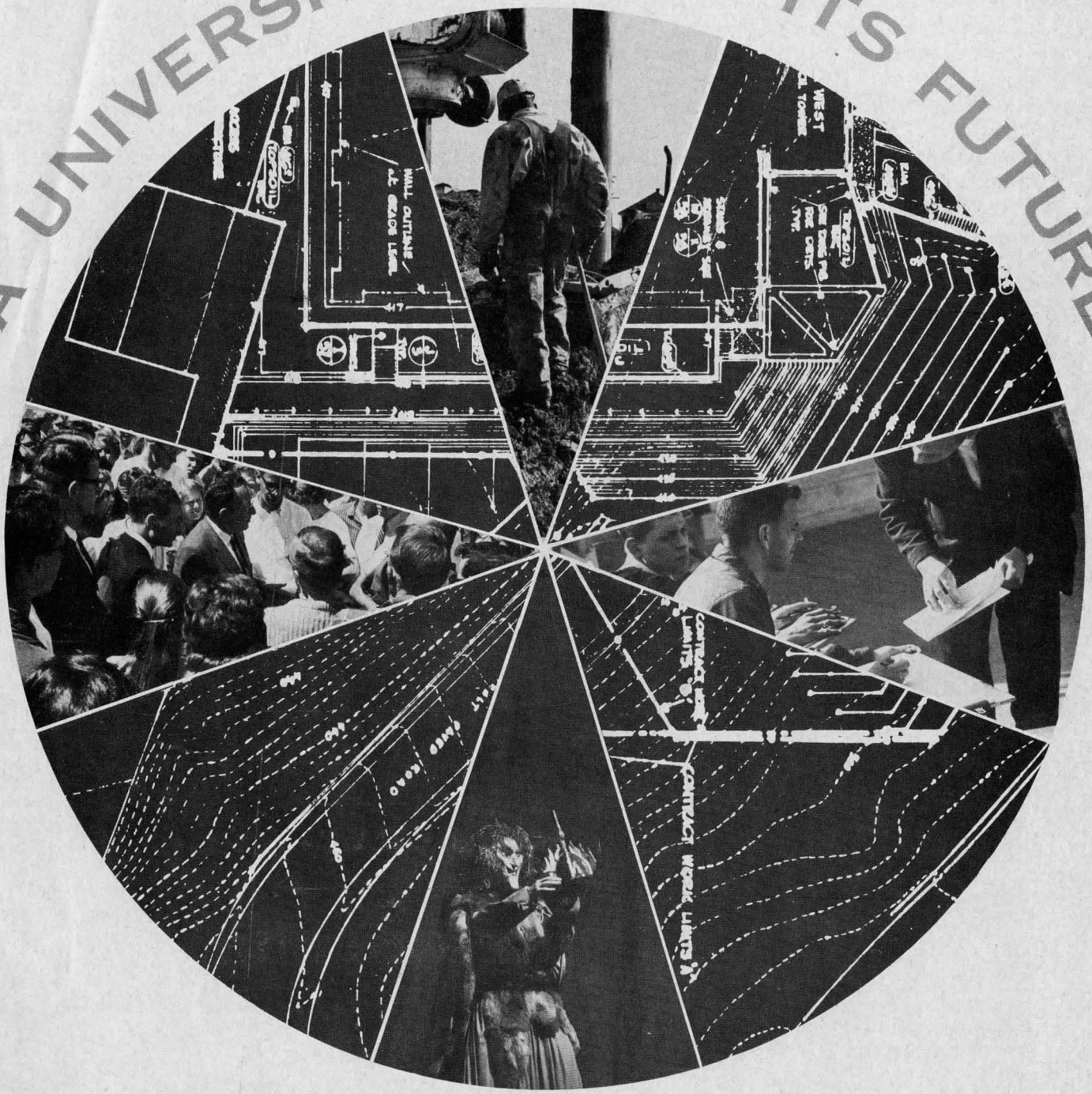
# A UNIVERSITY PLANS ITS FUTURE




# UNIVERSITY OF CALIFORNIA STATEWIDE BULLETIN

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# THE UNIVERSITY OF CALIFORNIA

CLARK KERR
*President of the University*

BERKELEY 4, CALIFORNIA

TO THE ALUMNI OF THE UNIVERSITY OF CALIFORNIA:

Almost daily I receive thoughtful letters and comments from some of you. Your questions about the future of your own campus, or about the outlook for the whole University, indicate that you are deeply interested in the vital problems of higher education, and in those of your University in particular.

Many of you, who have sons or daughters approaching college age, also wonder how their future may be related to the future of the University — whether, if they decide to come to the University of California, as you did, there will be room for them, and what kind of University they will find when they come. Many of you express concern that the University is changing and wish that it might remain the same as you remember it.

But it is impossible to escape change, for universities today are facing new demands, new problems, new opportunities. Your University must change if it is to meet the demands, to solve the problems, and to take advantage of the opportunities. Paradoxically, it must change to remain the same — to continue to play the same key role within California that it has played since its chartering in 1868.

From time to time reports have been prepared to let you and other friends of the University know how we are planning to meet the challenge of great growth.

In 1960, Year of Decision, the first report in this series, presented the Master Plan and its definition of the functions of the public segments of higher education in California — the junior colleges, the state colleges, and the University.

The second report, published last year, was called The University's Plan for Growth, estimating forty years ahead the extent of the expansion required to accommodate the large numbers of students expected. The Growth Plan determined maximum sizes for existing campuses, suggested appropriate rates of growth, and devised a schedule for opening new campuses.

The third report, on these pages, presents some of the highlights of the Academic Plan, which charts the University's more precise course of action during the next ten years, following the guidelines of the Master Plan and the Plan for Growth.

Quantity, achieved without sacrifice of quality, and diversity governed by a fundamental unity of purpose have been, and remain, the central themes of our planning.

Sincerely yours,

Clark Kerr

Clark Kerr

University of California
STATEWIDE BULLETIN
Published at Berkeley, California

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# BASE FOR PLANNING— THE MASTER PLAN AND THE DONAHOE ACT

Adoption, in the Donahoe Higher Education Act or by agreement between The Regents of the University and the State Board of Education, of most of the recommendations of the "Master Plan for Higher Education in California" gave the University a solid foundation for its planning during 1960-61 and 1961-62. The earlier year was devoted to preparing the "Academic Plan for the University of California," which was initially presented at a joint discussion meeting of the Committees on Educational Policy of The Regents and the Academic Senate on June 21, 1961, and was approved in principle by The Regents in July to serve as a guide for the development of the University until 1975.

The chief planning project during 1961-62 has been the development of academic plans for the individual campuses of the University. It is hoped that these plans will be approved in principle by The Regents this June or July.

In both the statewide and campus phases of our academic planning, the Academic Senate Committee on Educational Policy and the Chief Campus Officers have played key roles. Several special study committees have participated also, surveying a number of specialized and professional fields to determine whether additional University offerings in these fields may be needed between now and 1975 and to suggest the campuses where any new programs might most appropriately be developed.

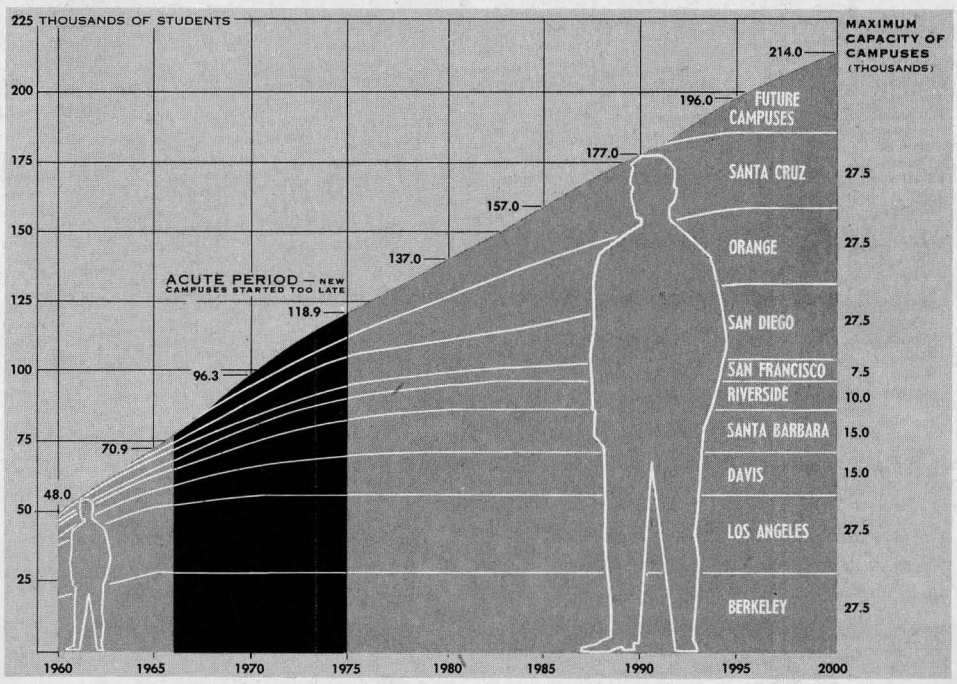
Among the recommendations on specialized fields were the enlargement of the capacities of the San Francisco and Los Angeles Schools of Medicine so that they can graduate approximately 256 physicians with the M.D. each year, rather than the present 162, and the establishment of a third medical school connected with the campus at San Diego, with a tentative class size of 100 students, which will bring the total number of physicians qualified by the University to 356 per year. The study committee on legal education recommended that the law schools at Berkeley and UCLA be expanded to ultimate capacities of 1,000 students each by 1965 and that two new law schools, one in Northern and one in Southern California, be established by the University by 1975. The Davis campus was noted to be a logical location for the first of the two new schools, because of the strong pressure of student demand at Berkeley and because of the proximity of Davis to the center of State government at Sacramento.

The Academic Plan comments on the functions of the University — teaching, research, and public service; presents the latest available estimates of future University enrollments, projected in detail to 1970 and roughly beyond that to the year 2000; and outlines the provisions that must be made (for additional faculty, new and expanded campuses, new curricular offerings, additional library resources, and other facilities for teaching and research) to enable the University to perform its functions with large and growing numbers of students.

**UNIVERSITY ENROLLMENTS TO 2000 A.D.**

ACCORDING TO RECOMMENDED PLANS

**NEW CAMPUSES WILL TAKE TIME**



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# UNDERLYING PRINCIPLES

Among the assumptions, policies, and beliefs that pervade the University's Academic Plan, the following are singled out for special discussion:

## THE QUEST FOR THE BEST STUDENTS

The University's first concern is for its students, and it will continue to seek the ablest, both by selection through its entrance requirements and by active search.

At the undergraduate level the University will base its admission policy on the Master Plan recommendations.* At the graduate level the University will contine to accept all qualified applicants, to the limits of available facilities. General standards of admission at all levels will be uniform throughout the University, and standards of achievement for awarding of degrees and certificates will be comparable.

The pressure of numbers must not preclude the University's developing active and systematic programs to attract students with marked ability. Scholarship and fellowship funds and special programs to interest gifted students, including special University offerings for outstanding high school students, must be increased. Provision must be made increasingly for honors courses, independent reading courses, and the like.

In keeping with the conviction that systematic efforts must be made to recruit outstanding students, The Regents earlier this year announced a scholarship program for students of demonstrated achievement and evident promise. The first group of awards will be made for the fall semester, 1962.

## THE ENVIRONMENT OF LEARNING

Not all education occurs in the classroom, the library, and the laboratory; therefore, the policy of the University is to attempt to produce the optimum environment for individual student development. Although it recognizes the financial difficulties involved, the University nevertheless must seek to provide residence facilities for as many students as possible who wish to live on campus during their University studies. The University also is determined to introduce beauty of architecture, sculpture, and painting to enrich the campus environment and to sponsor concerts, lectures, and exhibits as integral parts of the process of education.

## MODES OF EXPANSION

The University accepts responsibility for providing facilities to accommodate all qualified students, in fields appropriate to the University. This will be done in five ways: 1. By expanding existing campuses. 2. By developing new campuses. 3. By eliminating inappropriate or needlessly duplicative activities. 4. By cooperative use of facilities, including joint doctoral programs with the state colleges. 5. By incorporation of the summer months into the regular academic calendar.

The University's expansion to cope with the problem of numbers will be planned and timed to preserve academic quality; there must be no lowering of standards.

## DIVERSITY

The University should not only tolerate but also should strive deliberately to cultivate diversity among its campuses. The students and the general public of our State will best be served by the availability of a great variety of options for higher education. If we believe in individualism, diversity is not an accident, but a value to be sought.

The expansion of knowledge in our time is such that not even the most massive campuses of the University can achieve the highest standards of teaching and research in all fields. Selectivity is increasingly essential to the maintenance of such standards, as it is likewise basic to the achievement of a healthy diversity among campuses. In building areas of academic emphasis, each campus must "play to strength," developing clusters of strong departments and supporting research organizations. This selectivity on each campus must be exercised in the certainty that the alternative is mediocrity on a broader front. From the standpoint of the University as a whole, we may predict that newer campuses will find opportunity to stress combinations of studies relatively neglected on older campuses and that, in this way, work at the highest level will be available somewhere in California on some campus of the University. Diversity, then, is integral to the maintenance of excellence.

## CONSERVATOR AND INNOVATOR

A great university has a duty to the future as great as its duty to the present. It must do more than serve the society that is its context and that provides its support. It must maintain the heritage of the past; it must try to open new doors. Intellectually it must be both more conservative and more innovative than may be fashionable at any given moment. It must maintain scholars in fields a layman might consider fossils. It must support novel explorations that most people would call speculative. In the interests of future generations, it must take the long view and it may often have to defend the unpopular.

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*Top 12½ per cent of graduates of California high schools, public and private (or a B average in a specified subject-matter pattern).

Out-of-state applicants must rank in the top 6 or 7 per cent.

Transfer students who were ineligible to enter as freshmen under the above standards must present 56 units of acceptable transfer credit with a grade-point average of 2.4.

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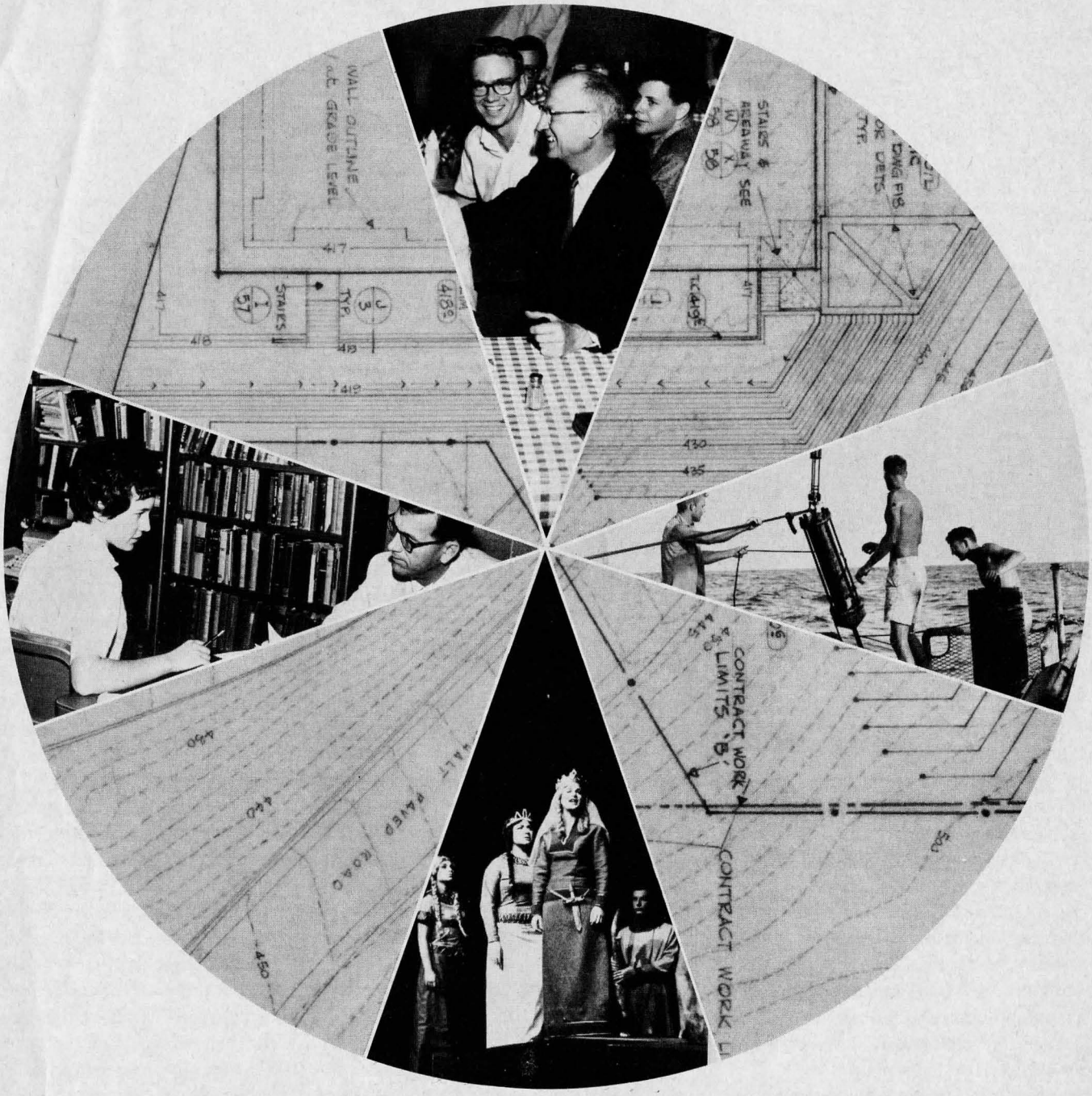


## BALANCED DEVELOPMENT

In its total structure—although not necessarily on every campus—the University must strive to achieve and maintain balance among the basic academic disciplines: the humanities and arts, the social sciences, and the natural sciences. This balance should be determined by the inherent significance of these fields, not by changing intellectual fashions. To serve society well, the University must retain independence of judgment.

## FREEDOM

The essence of a great university is freedom. Originality and creativity cannot long thrive in any other air. Both in its external relationships and in its internal actions, the University must maintain this freedom. Neither a prospect of immediate benefits, nor a wish to pacify critics, nor exasperation with troublemakers must tempt the University to impair the right of responsible scholars to pursue their search and discuss their findings.

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## UNITY AND DIVERSITY

One of the most important principles discussed above —a principle that will help shape many of our decisions in both the immediate and the more distant future—is that of diversity, or individuality, in the development of the campuses of the University. Diversity is desirable, as I have noted, from eminently practical considerations as well as because we believe in its value as a principle, since it is simply not possible to support on every campus of the University instruction and research in all the large and growing number of fields that are intellectually significant.

Diversity must be based, however, on an underlying unity of purpose and of standards. The University has one fundamental purpose: to provide the best in its allotted sphere. Unity of standards finds its most practical expression in the criteria for admission of students and for selection and retention of faculty, which must be essentially the same on all campuses. With uniformity for standards of admission of its students and selection of its faculty, the University can foster excellence and maintain its fundamental unity of purpose, and each campus can strive to realize the potentialities for distinction provided by the individual interests of its faculty, its particular location and surroundings, its physical design and architecture, its history and traditions, and its academic and administrative leadership.

We must recognize, in our planning, that a policy of encouraging and developing diversity will take more thought, consultation, and self-discipline on the part of faculty and administrators than if each campus were to conform to the same pattern. Continuing University-wide review of policy and programs will be needed, as well as provision for intercampus access to facilities and resources that are not available on all campuses. In this connection, I should like to comment briefly on intercampus exchange generally, on plans for cooperative development of the University's libraries, and on decentralization.

## INTERCAMPUS EXCHANGE

Intercampus exchange on an informal, individual basis has been carried on in some parts of the University for years. For example, physicists from the Los Angeles and San Diego campuses have frequently worked with research groups at the Lawrence Radiation Laboratory at Berkeley or have conducted their own experiments at the Laboratory, analyzing the resulting data at their home campuses. The several two-campus departments located jointly at Berkeley and Davis have occasioned a considerable amount of exchange between these two campuses. Riverside and Santa Barbara have depended to some extent on facilities at UCLA. In the future development of the University, however, it will be essential to give official encouragement to intercampus exchange.

One device to facilitate intercampus exchange is daily bus service connecting the three campuses in the north—Berkeley, Davis and San Francisco—and similar services connecting Riverside and Santa Barbara with UCLA. These services make it easier for faculty and graduate students on the smaller campuses to use the libraries and other facilities on the two large campuses.

The University's policy governing the establishment and operation of organized research units (institutes, laboratories, museums, etc.) now provides that such units must afford to qualified faculty members from all campuses opportunity for reasonable access to their specialized facilities, and that units must report annually the extent to which such access has been afforded.

Still another means of encouraging exchange among campuses will be Intercampus Cultural Exchange, including a Great Artists series, a Distinguished Faculty Exchange Lecture series, and an All-University Student Art Festival.

From such beginnings as these, we hope that the idea of intercampus exchange will become a concept not merely accepted within the University of California but one taken for granted as part of our daily academic life.

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## PLANS FOR LIBRARIES

Plans for the development of the University's libraries also reflect the principle of unity and diversity and the concomitant need for cooperation among campuses.

The plan is to maintain and further develop major libraries of great size and distinction at Berkeley and Los Angeles and to make available the collections on these two campuses to faculty and graduate students on all campuses. Berkeley's library is expected to reach a size of three million volumes by 1965, the collection at Los Angeles, by 1971. By 1971, also, collections on the other campuses will total at least three million volumes.

Initial basic collections for the San Diego, Santa Cruz, and Irvine campuses will be acquired for a time by the library staff at San Diego. These basic collections, chiefly for undergraduate instruction, will be substantially the same, and can be acquired all at once with more economy than if they were purchased individually.

The major specialized research collections at UCLA and at Berkeley, like the Clark Library and the Bancroft Library, have different emphases. This diversity of specialization will be continued and will be extended to the libraries on the other campuses as they grow in size and complexity, so that the University's total library resources will be as comprehensive in scope as they are great in size.

This type of interdependent library development cannot work without a great many devices and techniques to facilitate intercampus access to library materials. The bus service noted earlier is one such device. Photocopying of library materials, reproducing the Berkeley and Los Angeles catalogues, and providing more clerical help to locate and dispatch books requested on interlibrary loan are others. Here again, as in other areas, following a policy of diversity will require more planning, consultation, and self-discipline than would a policy of duplication. But the potential benefits of diversity are worth the effort.

## DECENTRALIZATION

The President's annual report for 1958-59 noted the inception of a program of administrative reorganization for the University, with delegation to the campuses of increased authority, to be exercised within the guidlines of general University policy. This reorganization, or "decentralization," is now virtually complete.

In 1958, there were 851 full-time staff members working in statewide general administration. In 1960, there were 206—a decrease of 76 per cent. Statewide student services were completely decentralized by December 1960. The net effect on the statewide general administration and service areas over the two-year period was a decrease of 717 positions—from 1,026 in 1958 to 309 in 1960.

The delegation of responsibilities and additional duties to the campuses resulted in increases of personnel in some areas. However, the total staff increase for the general administrative and service functions between 1958 and 1960 was 158 full-time employees, which is an increase of 8 per cent as compared with a total University staff increase of 22 per cent for the same period.

Additionally, reorganization and decentralization of the Graduate Divisions late in 1961 resulted in the transfer of 55 staff members to the campuses. Thus, the total decrease in statewide staff amounts to 772 full-time employees.

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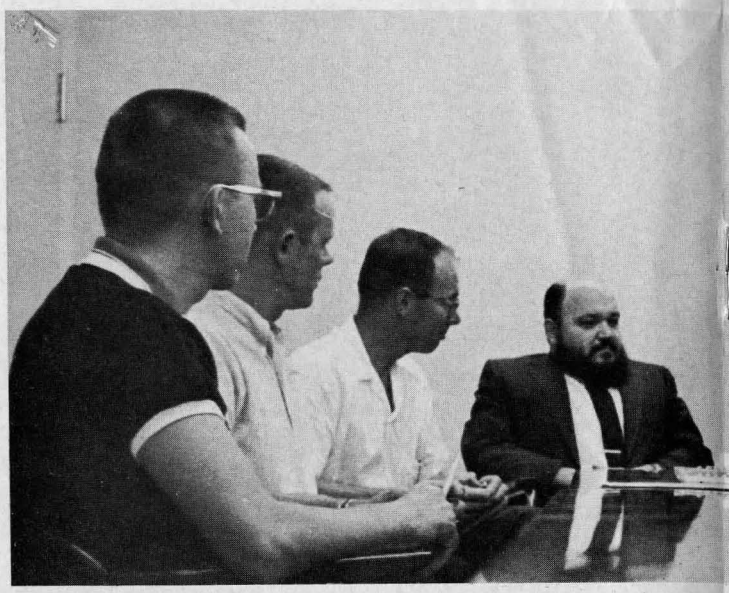

# THE UNIVERSITY AND ITS FACULTY

The scholarly reputation of any educational institution depends directly upon the quality of its faculty. In the years ahead, unprecedented expansion of enrollments in colleges and universities everywhere will create keen competition for college teachers. Demand will be particularly heavy for the scholars of outstanding achievement or promise in whom the University will be most interested.

On the basis of a campus-to-campus tabulation in 1961, which allowed for replacement of those who retire or resign, the needs for new faculty for the decade through 1970-71 are estimated at approximately 5,000 —considerably more than the entire present-day faculty of 3,300. (These figures represent full-time equivalent employment; the actual number of persons involved is larger but includes a substantial number of faculty on part-time or joint appointment.)

Recruiting additional faculty in the numbers and of the quality that will be needed will be a tremendous task.

## FACTORS IN FACULTY RECRUITING

While the University now has a relatively satisfactory salary scale compared with most colleges and universities, the University must be alert to obtain adjustments as the value of the dollar changes and as other major institutions increase compensation levels.

Fringe benefits and welfare provisions call for continued attention. Adequacy of retirement plan, health insurance, and removal expenses, for example, can be powerful forces in recruiting potential faculty members.

Thought must be given to distributing opportunities for research, both among campuses and among disciplines. In most fields, the larger and older campuses have more facilities and relatively more funds for research than have the smaller and newer campuses. Certain fields—notably agriculture and biomedical and physical sciences—have access to extramural grants that are large in contrast to the subventions available to support research in the humanities, social sciences, and certain other areas.

Prospective faculty members will also be attracted by a tradition of strong faculty self-government and an intellectual climate that fosters academic freedom and provides opportunities for free exchange of ideas among colleagues.

## TEACHING, RESEARCH, AND SERVICE

The need to recruit and keep a large and distinguished faculty requires the University to maintain its commitment to both teaching and research—to the preservation, transmission, and creation of knowledge and understanding. Performance of these vital functions is the major public service of the University.

A university engaged in research costs more to operate than an exclusively instructional institution of comparable size, but the University's distinctive contribution to society requires that both functions be carried on.

The basic motivation for research is human curiosity, the need to understand ourselves and the world. With increased knowledge and insight man has a better chance to achieve independence, self-respect, tolerance, and realization of his capacities.

Practical justification for research lies in the enormous improvement in man's estate—in his health, his comfort, and the conditions and fruitfulness of his labor—im-

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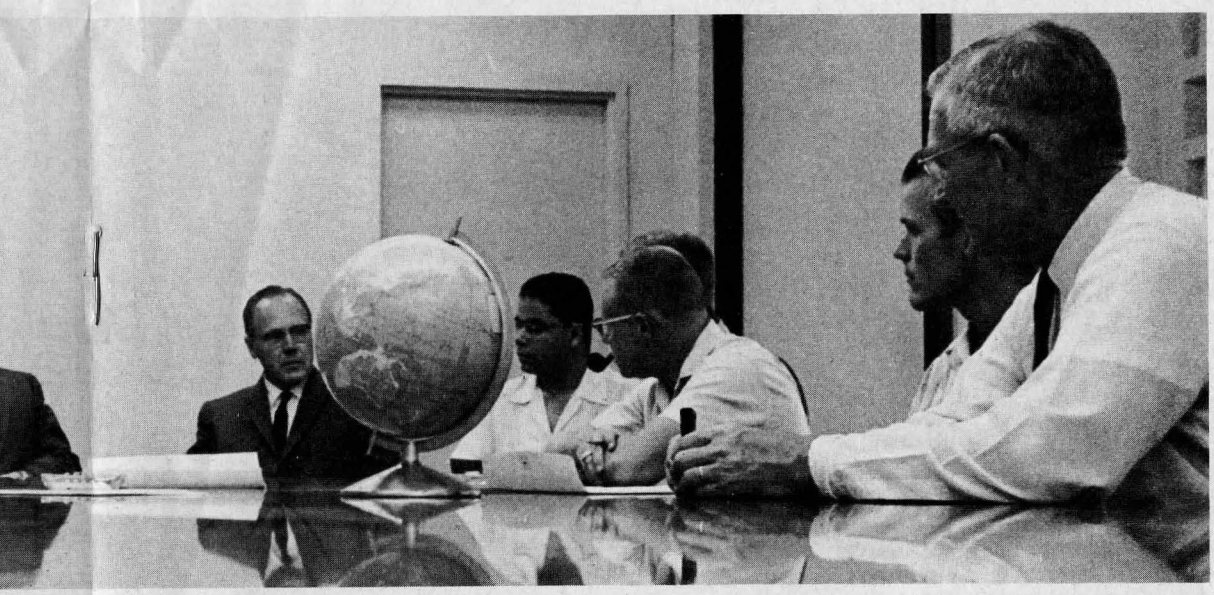

provement that has stemmed from application of research results to human problems. Recent revolutionary advances in agriculture, medicine, engineering, and public administration are partly outgrowths of research in such basic areas as mathematics, chemistry, physics, biology, psychology, economics, sociology, and even symbolic logic.

Research and graduate teaching are deeply related rather than separate procedures. The significance of this relationship was well stated in the November 1960 report of the President's Science Advisory Committee (Dr. Glenn T. Seaborg, chairman): "The process of basic research and the process of graduate education in universities must be viewed as an integrated task if the nation is to produce the research results and the new scientists that will maintain the leadership of American science. In this great endeavor, the partnership between the Federal government and the nation's universities will assume growing importance in the future."

A substantial part of the financing for the University's research program comes from Federal and private agencies, private donors, and industry, though State funds provide faculty salaries and a substantial part of the building facilities.

Since the teaching and research functions of the University are interdependent, they must grow together. During the coming period of rapid increase in student enrollment, the task of instruction will become much larger. Maintenance of a faculty large enough to allow adequate staff time for research as well as teaching is vital to the interests of the State and the Nation.

## NINE CAMPUSES, BUT ONE UNIVERSITY

Given a choice, why might a student select one campus of the University over another? He might be influenced by climate or by his liking for either an urban or a rural setting. He might wish to be near his home—or, on the other hand, he could prefer to get away and be independent. The history, customs, and distinctive traditions of one particular campus might appeal to him, or he might choose it because his family and friends have also gone there. He might be attracted by a particular instructional program or by the outstanding reputation of a teacher.

In addition to maintaining and developing further the graduate work that is a primary function of the entire University system, all the campuses (except San Francisco) will provide instruction in three undergraduate areas—letters and science, business, and engineering—and will help educate teachers for the schools and colleges of the State.

Beyond these basic offerings, other academic and professional curricula will be maintained where they are established and developed in new locations where they are needed. The variety to be nurtured on the older campuses, and fostered on the newer campuses and those to come, will give the future University student a wide range of choice. Whatever he cannot find on one campus, he should be able to find on another. Let me sketch briefly the prospects for each campus during the next several years.

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## BERKELEY

Paying tribute to the sense of historical mission that motivated his predecessors, Dr. Edward W. Strong on Charter Day this year, as Berkeley's third chancellor and in terms of his background as a philosopher, rededicated the oldest campus of the University to creative and critical inquiry.

Within four years after Berkeley reaches its 27,500-student capacity in 1964, the student "mix" will be stabilized with 12,000 in the graduate division; 6,000 in the first two years, or lower division; and 9,500 in the last two undergraduate years, or upper division.

Physically and spiritually, the atmosphere that will greet students here in 1970 is likely to be much the same as their parents remember. More buildings and higher buildings (built higher to preserve the open spaces on campus and protect the natural beauty) will have appeared on the central campus and new residence halls will have been added to the complex south of the campus. In this setting, the larger proportion of advanced students will season with maturity the intellectual ferment that has always been Berkeley, without lessening the essential vitality and personality of student life there.

As the graduate division grows relatively bigger, the size of the faculty should increase until a working ratio of one teacher to sixteen students establishes "full-time" faculty needs at about 1,700 by 1970.

Teaching programs common to all campuses will continue to be supplemented at Berkeley by agriculture, architecture, criminology, education, forestry, law, librarianship, optometry, public health, and social welfare. Berkeley's threescore organized research and service units already range (alphabetically) from the Agricultural Experiment Station to the Virus Laboratory and include such distinguished names as the Lawrence, Crocker, and Donner Laboratories, the Bancroft Library, and the Leuschner Observatory.

Proposals for new or revised programs in teaching and research are expected to be closely related to the advance of knowledge and the exchange of ideas in fields already represented on the campus.

## DAVIS

With Davis rapidly evolving from a specialized campus into a general one, today's "Cal Aggies" are majoring in letters and science, engineering, and veterinary medicine, as well as in the traditional agricultural fields. While becoming a northern California center for research and professional education, however, the campus also will continue to serve as the University's primary locus for work in agriculture. The College of Agriculture will place increasing emphasis on problems in the related basic sciences.

Engineering is the most recent addition to the campus. Basic medical sciences will be added, and—prompted by its location near the State Capital—Davis will also develop programs in law and public administration.

When enrollment reaches its planned maximum of 15,000—about 1980—the teaching staff will total approximately 940. The graduate division will comprise about 4,000 of the total enrollment.

The broadened campus, as envisaged by Chancellor Emil M. Mrak and his colleagues, will include the basic disciplines of liberal education, along with work of distinction in home economics and veterinary medicine; the Agricultural Experiment Station; certain professional schools; and related bureaus, institutes, and centers.

Research and service activities are contemplated in the areas of ecology, water resources, toxicology, state and local government, and international training in agriculture. An arboretum is also planned.

A division of University Extension will aid the campus to serve its surrounding community. A conference center will provide facilities for meetings of national and international societies and groups.

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## LOS ANGELES

In less than half a century UCLA, growing with the burgeoning Los Angeles area, has changed from a provincial normal school into a large, complex, cosmopolitan urban university.

In the same short space of time a small faculty has evolved into a large and distinguished body of scholars. Although its first Ph.D. degree was awarded only twenty-three years ago, UCLA today offers a broad spectrum of graduate studies and professional schools.

The record is one of youth and rapid development in quality as well as in quantity, influenced both by the explosive growth of southern California and by the fortunate fact that UCLA was developed as a member of the University of California family and thus has shared a great academic tradition.

"Our target for 1970 is clearly stated—a distinguished and productive center of intellectual and cultural activity, a university which ranks among the very finest in the western world," says Chancellor Franklin D. Murphy.

The future, which will see 27,500 students at UCLA (15,500 undergraduates, 12,000 graduates) will require expansion of the faculty to about the same size as that of Berkeley by 1970.

Strengthening of the program in the fine arts is one example of the kind of specialization in which Los Angeles can engage effectively because of its southern California setting. A new school of dentistry will soon open; a new school of architecture, about 1964.

## RIVERSIDE

The College of Letters and Science, planned to be comparable to the best of the private liberal arts colleges in the country, is the foundation on which the Riverside campus will develop in the years ahead. As Chancellor Herman T. Spieth has stated: "On this solid base we anticipate development of a full gamut of graduate programs, specialized schools of instruction, institutes and centers, without losing the reputation of high quality for undergraduate instruction which exists at present."

The graduate division was instituted in 1960, with chemistry the first department to give work leading to the Ph.D. degree. In the same year the College of Agriculture was established by The Regents, as were several graduate programs beginning in the fall of 1961.

In keeping with the demands of the general campus, new schools, institutes, and centers will be created.

Enrollment will approximate 7,300 students by the year 1970 with a maximum of 10,000 in the following decade. Development of programs in education, engineering, and business administration is anticipated by the end of this decade or the beginning of the next.

In its provision for expansion of graduate and professional education, Riverside will doubtless be influenced by southern California's rapid population growth and by its unique pattern of industrial concentration.

The campus is located on the site of the fifty-five-year-old Citrus Experiment Station, which in 1961 became the Citrus Research Center and Agricultural Experiment Station.

Research units have come into being to meet the interdisciplinary needs of faculty and students. The first of these to be established, the Air Pollution Research Center, offers a wide spectrum of research not only on the Riverside campus but to the statewide University.

Appropriate to a State with large stretches of desert and arid lands is the Philip L. Boyd Desert Research Center, for which the University has acquired a block of 3,420 acres of virgin desert land. Here a biological station devoted to basic scientific studies of desert plants and animals is now developing.

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## SAN DIEGO

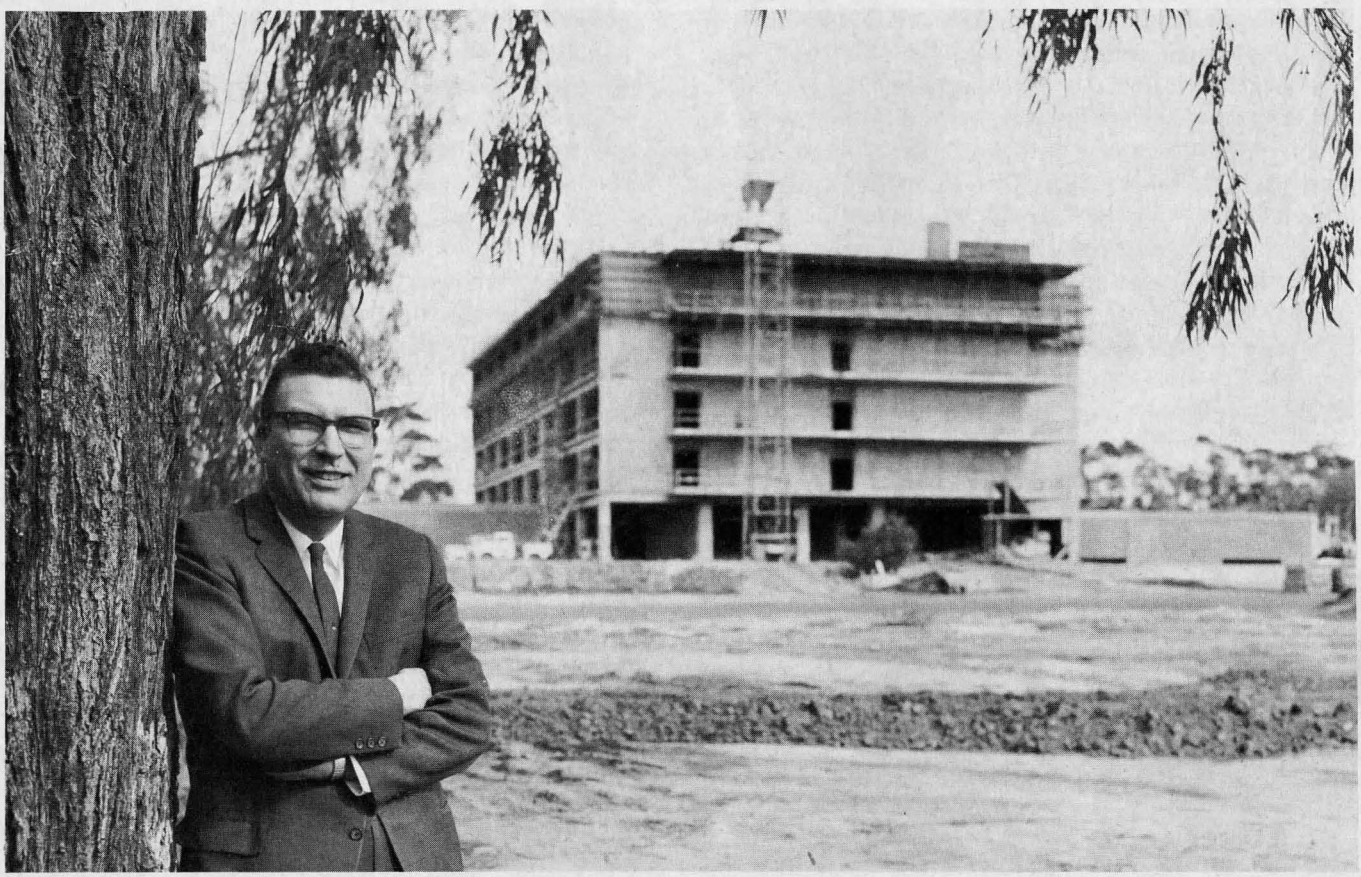
Aside from the Scripps Institution of Oceanography at La Jolla, which has been a part of the University for decades, the San Diego campus is a new one. Expansion began in 1958 when The Regents authorized the establishment at San Diego of a graduate school in science and engineering. That school admitted its first students in fall 1960. The first group of undergraduate students, in accordance with the Master Plan, may come in 1964. Thereafter, growth will be increasingly rapid, with the campus reaching its maximum enrollment of 27,500 in 1995.

The new general campus will grow on a 1,000-acre site adjacent to the original 158 acres of the Scripps Institution, several miles north of the center of metropolitan San Diego. Half the site is at present owned by the City of San Diego, half by the United States Government. Arrangement for the transfer of this land to the University is under way.

The Regents have already authorized for San Diego a new medical school, which is expected to grow to an enrollment of 600 by 1970.

Besides the programs in medicine and the natural sciences, San Diego will offer programs in the humanities and social sciences and possibly also in business administration related to applied science and technology, says Chancellor Herbert F. York. Another possibility for future consideration is a school of law.

Already located at San Diego are branches of two statewide University activities, the Institute of Marine Resources and the Institute of Geophysics and Planetary Physics. The teaching program currently includes graduate work in physics, chemistry, biology, the earth sciences, marine biology, and oceanography.



*New buildings rise behind Chancellor York on the expanding San Diego campus.*

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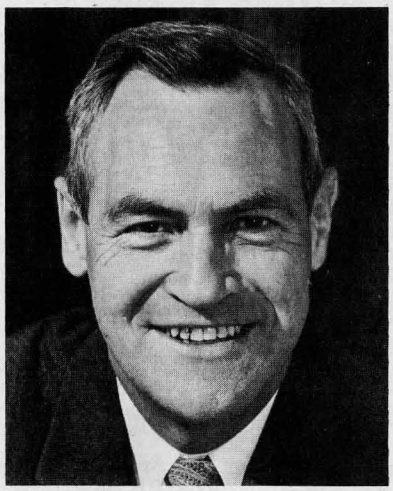

*Professor Vernon I. Cheadle of Davis succeeds Chancellor Gould, resigned, at Santa Barbara.*

## SAN FRANCISCO MEDICAL CENTER

On Parnassus Heights, a complex of hospital and laboratory buildings marks the San Francisco campus as a headquarters of instruction and research in the medical and health sciences under Provost John B. deC. M. Saunders.

The 1961-62 enrollment in dentistry, medicine, nursing, pharmacy, and a number of paramedical fields totalled 517 undergraduates and 1,378 graduates.

Existing programs will expand to meet the needs of a growing population and a changing technology. Increased responsibilities face not only the academic departments but also such organized research units as the Cancer and Cardiovascular Research Institutes, the Hooper and Proctor Foundations, the Metabolic Unit, and the Biomechanics Laboratory. Continuing education programs for all the major health professions will be developed further.

Much of San Francisco's projected growth reflects the growing importance of the biological, physical, and behavioral sciences. The campus may eventually have its mission broadened to include upper division and graduate work oriented toward the biological sciences and related disciplines. Enrollments in Master's and Ph.D. programs will increase substantially. Plans are under way for a biostatistics center and a multi-disciplinary neurological research institute.

## SANTA BARBARA

The former undergraduate liberal arts college at Santa Barbara is also being transformed into a full-scale university campus with a wide range of graduate programs and appropriate specialized schools and research units.

Santa Barbara will reach its planning figure of 15,000 students within the decade of the 1970's. Meanwhile, by 1970, the student body is expected to grow to at least 11,800, including an increasing proportion at the graduate level (over 10 per cent of the total by 1970). The number of teaching faculty needed by that year will be in the neighborhood of 740.

Under its first Chancellor, Samuel B. Gould, Santa Barbara established several new graduate programs and undertook long-range academic and physical plans. The new Chancellor, Vernon I. Cheadle, will continue these developments.

Santa Barbara administers the Education Abroad Program for students from all campuses of the University. The first foreign center will open in the fall of 1962, at the University of Bordeaux, France, with about 70 California students participating.

Specialized fields of instruction existing or proposed at Santa Barbara include engineering, education, fine arts, and business economics. Organized research activities may include a computing center, a marine laboratory, and a small cyclotron to complement the Central Laboratory for Radioactive Materials (now under construction). Also planned are a Channel Islands laboratory for studies of primitive man, and institutes or bureaus for engineering research, study of man under stress, government research, and business and economic research.

The new "Experimental Program: Instructors for Colleges" (EPIC) is under way at Santa Barbara, supported by a five-year grant from the Ford Foundation. It is concerned with selecting and encouraging able students to prepare for future college and university teaching.

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## IRVINE

Located in the southeastern half of the Los Angeles-Orange County metropolitan area, the new 1,000-acre campus on the Irvine ranch is in the heart of the fastest growing region in the State. Properly planned in conjunction with the community, it will make room for its eventual 27,500 students and the necessary staff and supporting services by around 1990. Instruction will begin in the fall of 1965, with 500 students and a teaching staff of 50.

By 1970 there will be about 3,250 students—51 per cent lower division, 46 per cent upper division, and 3 per cent graduate.

Tentative suggestions for initial programs include arts and sciences, architecture-planning, urban and suburban studies, business, and engineering (perhaps in combination). Nuclear and electrical engineering are technical fields particularly appropriate to this increasingly industrial area.

Dr. Daniel G. Aldrich, Jr., statewide Dean of Agriculture, who has been appointed Chancellor for the new campus, points out that the University and the community, including its industries, will be planned together. A school of environmental design could well be one of the first features developed there. This school, on the graduate level, could serve the entire country in research on area planning and land utilization.

Irvine hopes to encourage exchange of personnel between the University and the science-based industry of the area. Faculty can serve as consultants to industry and industrial experts as part-time teachers in the University.

## SANTA CRUZ

Freshmen of 1970 will find a five-year-old campus with 3,250 students located on a redwood-forested plateau at the edge of the city of Santa Cruz, overlooking Monterey Bay and the Pacific Ocean. Of these students 52 per cent will be freshmen and sophomores, 46 per cent upper classmen, and 2 per cent graduate. The student body will increase progressively until the peak of 27,500 is attained about 1990.

*Vast empty spaces now challenge the imagination of Chancellor Aldrich on the Irvine site.*

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Proximity of the Army Language School at Monterey suggests interesting possibilities for Santa Cruz in fields of comparative languages and literatures. Other programs might include conservation of natural resources, recreational areas, engineering, landscape architecture, forestry (perhaps transferred from Berkeley). Business administration could be related to engineering or other technical studies.

Located in the campus center of what was once the Cowell ranch will be the humanities, social sciences, and such general campus facilities as the library, the student center, and the main auditorium.

If final approval is forthcoming, around this core will be several residential colleges designed to include academic as well as housing units, providing living and dining facilities for students and some faculty members as well as some classrooms and small reading and reference library collections.

Surrounding the residential colleges will be found the physical and life sciences, professional schools, some living accommodations for advanced and graduate students, physical education facilities, and research installations.

Chancellor Dean E. McHenry brings to Santa Cruz his experience with the Master Plan Survey Team and as University Dean of Academic Planning.

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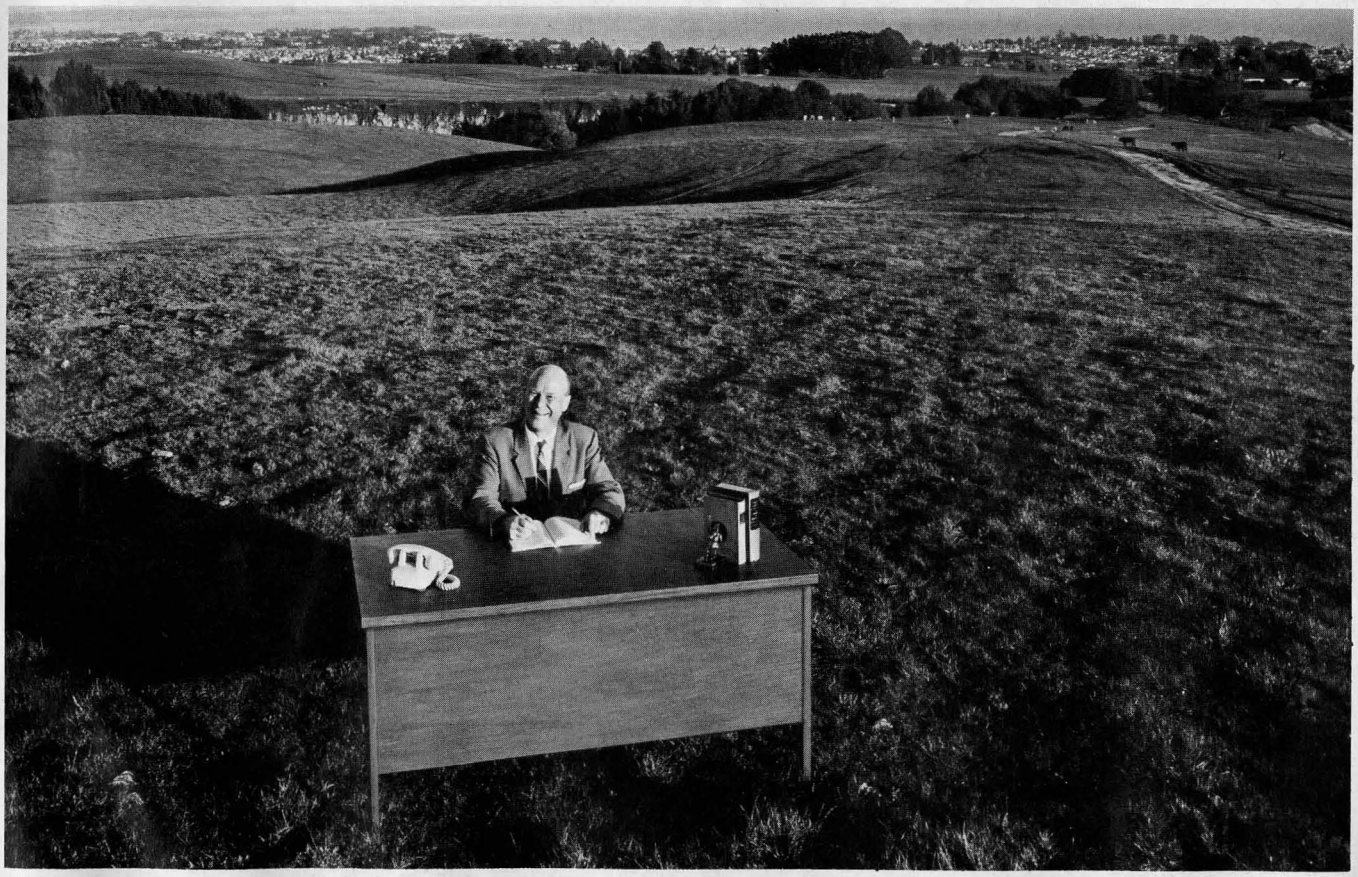
By 1975, then, there will be nine University of California campuses, serving the varied needs of the largest State in the nation for teaching, research, and expert public service. The University, in planning its future, has been concerned to meet these needs as efficiently and economically as possible, while still upholding the high standards of performance that the people and the State of California have come to expect from their University. Growth, in itself, is not enough. Growth in quality and in variety, as well as in size, will enable the University to make the same important contribution to California's future development as it has made to the great accomplishments of the past ninety-four years.



*Chancellor McHenry anticipates the future for the new campus to be developed at Santa Cruz.*

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*"Even plans successfully realized have implications for the future — for there remain several University campuses without student centers! But this illustrates well the essence of a University — the instinct to press forward toward the tasks of the future, building on the achievements of the past and present."*

MRS MAX W STERN
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# This Is PRINCETON

**ABOUT THE TOWN . . .**

**Almanac for Newcomers.** This is the season when new families move into Princeton — to study, teach, do research or work at jobs.

As a kind of guidebook for the newcomers who are among us for the first time this fall, TOWN TOPICS offers a spatterpaint picture of what the town is like, how it differs from other towns and what new residents can expect.

Princeton is really two towns. This is not a metaphor but a political and geographic fact. Geographically, the Borough is a hole in a doughnut and the Township is the doughnut around the hole. The arrangement goes back to the 18th century when Princeton was the half-way point on the stage route between New York and Philadelphia. In those days, the Borough was the cluster of houses and shops along the King's Highway (Nassau Street) and the Township was the farmland.

Politically, this means that, today, Princeton has two of everything: two mayors, two governing bodies, two police chiefs, two police forces, two school superintendents, two separate school systems.

In population, the two are about equal, with 11,890 in the Borough, 10,320 in the Township, for a total of 22,210.

In reality, however, there is only one Princeton, a unified community built around the learning process. It is often called an intellectual town, but "scholarly" might be a more accurate description, if one thinks of the current interpretations sometimes given to "intellectual."

There are, for example, no conventional intellectual trappings. Two or three years ago, someone started a little coffee house on Nassau Street where people could meet to play chess, sip coffee, listen to jazz, wear sandals and talk. After a few meagre months, it quietly faded away because, in Princeton, people do all these things in their own homes.

**The Male Animal.** Here, the scholars live a middleclass life, getting married and divorced and raising families and wearing conservative suits and probably not growing beards.

Mingling with them at PTA meetings (men, both scholars and non-scholars, attend PTA meetings in Princeton) or in the supermarkets (many men shop) are the community's middle and lowbrows.

Often these are commuters, men who are away from home 11 or 12 hours a day, usually working in New York, often working at some enterprise allied to education. There are about 270 commuters who ride the "dinky" to Princeton Junction and the Pennsylvania main line every morning, a score or more who drive up to Belle Mead to the Reading and three or four who take the bus. Another 350 or so drive to the Junction and commute from there.

Considering Princeton's geographic location in suburbia, the ratio of commuters to population is low. Because of the presence of giants like RCA, Educational Testing Service and the University, plus the Gallup opinion research combine, dozens of other research organizations and many small electronic plants, most Princeton residents live and work right here in town.

These people — commuters, stay-at-homes, faculty, rich and poor — form a casual and informal, but rarely chummy, community. Princeton men and women have for years been the despair of the town's clothing merchants because of their casual mode of dress.

**Credit Risk?** A Princeton jeweler tells the story of a man who selected a $700 diamond and started to pay for it by check. The customer was unshaven, dressed in a torn sweater and a pair of dirty sneakers, and the jeweler decided on a quiet talk with the man's bank before accepting the check. The bank informed him that the customer could buy hundreds of $700 diamonds and still be quite solvent.

Princeton women wear a uniform consisting of round-collared blouses, Bermudas (summer) and tailored skirts (winter). A woman wearing a hat on Nassau Street is on her way to New York. She is wearing the same black suit she has worn to New York for six years. In Princeton, high fashion is a sign that one's mind is not on the serious side of life.

Socially, Princeton residents take in each other's wash. Teen-agers have been complaining recently that "we have no place to go." Neither have their parents, because entertaining is traditionally done at home. I invite you to my house, you invite me to yours.

It may be a party given by a key-punch operator in a Cape Cod living-room so small that everybody sits on the floor, or a garden party for 200 given

—Continued on Page 2

**THIS IS PRINCETON: Although Albert Einstein died in 1955, his home at 112 Mercer Street is still pointed out to visitors. Its white paint and dark shutters, its trim hedge and its shading tree mark it as typical of many Princeton homes. Newcomers who would like to learn more about their new town may read about Princeton below. (Staff Photo)**

## This Is Princeton

—Continued from Page 2

dogs were attacking sheep in the northwestern corner, and woodlots were growing unattended off Valley Road. Today, the farms are sewn with split-levels and the Township with problems.

Princeton institutions have grown with the town. There is an accredited hospital in a state of continuous expansion, two school systems in the educational vanguard and a top-notch volunteer fire department. (In case of fire, call police. Borough: WA 4-4141, Township: WA 4-3105.) And incidentally, that horn and siren which sound off each Wednesday noon from the three firehouses, are testing, just testing.

There is great concern today — it will be more evident as autumn advances, because the town still tends to snooze during the summer — about "Keeping Princeton PRINCETON." What about letting industry creep in? What kind of growth should be allowed? Should the whole town be made to look Colonial?

And often the most vocal supporters of "keeping Princeton just as it always has been" are . . . the newcomers.

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NEW YORK TIMES, SATURDAY, SEPTEMBER 15, 1962.

# Chemist Who Defied Nazis Honored

ATLANTIC CITY, Sept. 14 (AP) — A Dutch Scientist who refused to be browbeat by the Nazis at the outbreak of World War II was named winner today of the highest honor in American chemistry. The winner of the honor, the American Chemical Society's Priestley Medal, is Prof. Peter J. W. Debye of Cornell University. Professor Debye came to the United States in 1940 after the Nazis forced him to step down as director of Berlin's famed Max Planck Institute of Physics because he refused to become a German citizen.

Four years before that he brought indirect honor to Germany by winning a Nobel Prize in physical chemistry while serving as director of the institute, then known as the Kaiser Wilhelm Institute.

Prof. Debye is now a Professor Emeritus of Chemistry at Cornell University.

Dr. Peter J. W. Debye

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McGEORGE BUNDY

# THE EASY CHAIR

## A Report from an Academic Utopia

*The prophetic guest in the Easy Chair for this New Year's Day is usually seated in the White House at his job as Special Assistant to the President. He was formerly Dean of the Faculty of Arts and Sciences at Harvard. His article is adapted from a speech made at the 1961 Corning Conference on "The Individual in the Modern World."*

THE question that occurs to me, as I speak to you in this year of 1975, is this:

Who would have supposed, back in 1960, that we in the universities should easily reach so many goals that then seemed bold to their proponents? Then we had perhaps five or ten universities of truly international quality; we now have twenty-five. Then it seemed as if the small college might be dying a natural death, but we now understand that its apparent anemia was only the preliminary to an extraordinary rebirth of usefulness and of influence. In those days we asked ourselves in tones of anguish where the teachers of the next generation were to be found; we now know that the question was unreal. In the new life of our colleges and universities there is always help for those who will learn how to seek it. (This may always have been true, but a truth not acted on has no great meaning.)

Perhaps the most surprising thing, to those who were engaged in academic administration in the 1950s, would be our splendid discovery that as new institutions grow in strength, old ones are not weakened. Yale and Princeton have not vanished from the mountain tops as Washington, Vanderbilt, and Brown have joined them. Even Harvard has recovered from the damage which was done by its noisy and overnoticed Washington branch in 1961. And while for a brief period in the middle 1960s it appeared that the entire university system of the State of California might be consumed by a civil war, we now know that these were merely the growing pains of shared greatness, and groups of Eastern deans have even learned to think that this greatness is good.

It may be useful to consider the things which our colleges and universities are *not* doing as they were doing them fifteen years ago. I think, indeed, that if I were to try to explain our accomplishments to an American still living in 1960 I should find it best to begin by telling him of the way in which distinctions and categories which he took for granted have been gradually blurred—and even discarded—in our best institutions today. At least four of the distinctions which were central to the structure of the American college in 1960 have ceased to have any real importance.

### DISTINCTIONS RUBBED OUT

I. THE first and in many ways the greatest of our accomplishments has been to rub out most of the distinctions separating the student, the teacher, and the research scholar. These distinctions bedeviled our thinking about higher education in the first hundred years of the American university.

You will recall that by 1960 these opposed categories—and perhaps particularly the categories of "teaching" and "research"—had begun to make a fractionated shambles of the American university. In spite of all that older and wiser men could do and say, fashion seemed to favor what was called "research" as against what was called "teaching." Why was this so? In part it was, of course, the inevitable result of the fact that a professor's reputation could spread more widely by way of the printed word than by way of effective work with students. In part also it was the result of the horizontal institutionalization of specific branches of learning, across the universities and colleges of the country—a topic on which I shall have more to say in a minute. And in part this division grew from the remarkable expansion of the federal government's interest in scientific research in the years after the second world war. With a timidity from which it has fortunately escaped, the federal government initially felt it essential to limit its activities to "research," leaving "teaching" to others. It was imitated, and perhaps in some measure even anticipated, by some of the great philanthropic foundations (which even today have only an imperfect and intermittent understanding of the way a university really works).

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Seated, l. to r.: Bennett Cerf, Faith Baldwin, Bergen Evans, Bruce Catton, Mignon G. Eberhart, John Caples, J. D. Ratcliff
Standing: Mark Wiseman, Max Shulman, Rudolf Flesch, Red Smith, Rod Serling

Photo by Philippe Halsman

# 12 famous authors start a new kind of writing school

If you can show you have writing talent worth developing, they are interested in helping you achieve professional success... right in your own home, and in your spare time

If you want to write professionally, here's an opportunity never before available:

These leading authors and teachers in every branch of writing have joined together to create a school of professional writing to help you develop your skill, talent and craftsmanship; and to pass on to you their secrets of achieving commercial success and recognition.

The training will be supervised by Rod Serling, TV's top dramatist and the winner of 5 Emmy Awards; Bruce Catton, Pulitzer Prize winning author; Faith Baldwin, author of 80 best-selling books and hundreds of short stories; Max Shulman, famous creator of TV shows, novels and stories; Bennett Cerf, publisher, editor and columnist; Red Smith, nationally-known newspaper columnist; Rudolf Flesch, well-known author and authority on business writing; Mignon G. Eberhart, world famous writer of mystery novels and serials; Bergen Evans, university professor and co-author of *A Dictionary of Contemporary Usage;* J. D. Ratcliff, called "America's No. 1 craftsman in the field of non-fiction" by *Time* magazine; John Caples, one of the nation's great advertising copywriters, and author of *Making Ads Pay;* and Mark Wiseman, noted teacher of advertising and author of *The New Anatomy of Advertising.*

These famous authors have applied to the teaching of writing—for the first time—a principle which has proved itself time and again: "If you want success for yourself, learn from successful people."

## Four separate courses

Over a three-year period they have created four professional courses in writing — Fiction . . . Non-Fiction . . . Advertising . . . and Business writing. (The first three contain sections on writing for television.) They have developed a series of home study textbooks, lessons and writing assignments that present — in a clear and stimulating way – what they have learned in their long, hard climb to the top.

They start you with the principles and techniques that underlie all good writing. Then you move on to the specialized course of your choice.

## You are a class of one

Every assignment you mail to the school is carefully read, edited and corrected by your instructor who is, himself, a professional writer supervised by the School's distinguished faculty. He then writes a long personal letter of analysis and encouragement, and shows you ways to improve your writing. While he is appraising your work, no one else competes for his attention. You are literally a class of one.

This method of instruction has been pioneered with remarkable results in the field of art by the Famous Artists Schools, parent organization of the new writing school. During the past twelve years, these schools have trained thousands for successful professional art careers. And their teaching methods have won the respect of educators throughout the world.

As a student of the Famous Writers School, you will enjoy exactly the kind of relationship you would have with editors and publishers. As Robert Atherton, editor of *Cosmopolitan* magazine, says: "The concept of teaching writing by correspondence is sound, just as editing a magazine by mail is sound. I have never seen most of the great writers who have been contributors to *Cosmopolitan* for years."

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I am interested in finding out whether I have writing talent worth developing. Please mail me, without obligation, a copy of the Famous Writers Talent Test.

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Foundations which sought the credit for supporting "research breakthroughs" were not always sensitive to the impact of their philanthropy upon the internal structure of university life.

But the main responsibility for this radical disjunction of two things which we have now learned to put together must be placed upon the universities and colleges themselves. After all, it was their business to understand first—and to sustain most intensely—the notion that, in the life of a university man, learning as a whole is what counts. It was for the universities to remember and to reassert that there is in the end no sharp line between the learning of a freshman and the most abstract inquiry of the most isolated professor. By the very nature of a university (and I apologize for repeating these truisms now), these widely different activities are part of one way of life, and it follows, with the most inexorable logic, that the institution which separates them sharply, or seems to place one above another, must gravely damage itself.

I will not weary you with a description of all of the kinds of damage that were done by this false distinction. Let us recall simply that the separation of teaching and research flaws both kinds of activity. If learning by a student is not connected to the process of inquiry as a way of life in itself, it is not really alive. On the other hand the work of the investigator takes its full meaning only from the learning by others of what it is. These notions were understood, even in the bad old days, by the best of our teachers and investigators. It is the saving grace of universities that their best men will always transcend the worst pattern of organization and the most radical errors of customary belief.

But the true importance of proper understanding is that it releases a liberating force for ordinary men, and I do not think there will be argument among us as to the improvement which has occurred as we have abandoned this great false distinction. No longer do hundreds of our better men miss the joys of working with students because they have been led to think that "teaching" is beneath their dignity. No longer do thousands of men without the gift of great imaginative investigation torture themselves, and clutter the learned journals, with work of astonishing triviality and indistinction. Our new freedom and understanding have liberated even those who were temperamentally best adapted to the sort of reality there was in the old distinction. The man whose heart really does belong almost wholly to research no longer feels a moral pressure to give a reluctant fraction of his time to forms of teaching which he does badly. In our university community of 1975, all kinds of work are equally honored; all are understood to be a part of the whole; and all are interconnected in so many ways that efforts to protect a misconstrued "balance" are no longer necessary.

Hardly less important than the impact upon the scholar himself of this emergence from folly is its meaning for the student. Our undergraduates and graduate students no longer think of themselves as passively exposed to "teachers." Instead they are members of a learning community. They are younger than the faculty; they know less; they are, as a group, somewhat less gifted intellectually. But they are participants in common activity. It is no longer a rarity to have freshmen who play active roles in laboratory investigation. It is no longer queer for seniors to help in the learning of freshmen. We no longer distinguish sharply between the book which is read as part of a course list, and the book which is read because it is an essential element in a joint inquiry from which a professorial essay may emerge. As the students have become simply junior members in an organization with a common purpose, we have begun to find it hard to understand the massive literature on what was called "motivation" which burdened the desks of academic men in the 1950s.

## IRON HANDS OF LITTLE MEN

II. THE beginnings of this radical realignment of categories were evident in the late 1950s, and those of us who were then young Turks would not have been amazed—though we would surely have been delighted—to hear in 1960 that so much could be accomplished in this direction so soon. But I think we could not have contained our astonishment if we had been told then of the change which has occurred in the place and meaning of the "department" in American academic life. For in 1960 the department—whether of chemistry or economics or psychology or philosophy—the department was the decisive unit of organization and action. We would never have guessed that it would so soon become insignificant. For it seemed plain, in those days, that the departments had laid their iron hands upon the final sources of power and influence. Did they not control budgets, promotions, and new appointments, subject only to the frail consent of harried and outmaneuvered administrators? Were they not the source of the magical and persistently dominant degree of Ph.D.? Did they not, in their constantly tightening network of alliances across the major institutions, embody all of the strength and many of the attitudes of the most ferocious of craft unions, so that all philosophers in leading departments of philosophy were banded together against outsiders everywhere? Were not the departments, in short, the necessary and inevitable strongholds of the little men who have always needed more strength than they themselves

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can bring? How astonishing then that they should so soon become unimportant!

What did it, obviously, was the true and irresistible course of the higher learning itself. The brilliant results of scientific investigation and creative scholarship which characterized the first six years of the 1960s simply smashed the old lines of division. What could be made of the notion of a department of history, as distinct from psychology, when it became wholly clear that Professor William Langer had precisely identified the wave of the future when as President of the American Historical Association he told his colleagues in the mid-'fifties that future historians must also be modern psychologists?

How could there be a department of chemistry, as distinct from physics, when over a period of years it became more and more plain that the first-rate chemists were first-rate physicists first?

How could there be a rational separation of economics and politics after the great and path-breaking works on economic development as a political phenomenon which dominated the best departments in both fields in those same years?

How could departments matter, as centers of academic power, when it became the rule and not the exception for the very ablest men to insist upon the right of affiliation in whatever part of the university they were welcome?

In the end it was learning itself which did to the departments what a few extraordinarily far-sighted individuals, like James Bryant Conant, had tried to do with money, and with especially prestigious professorships, a generation before. The brightest of the young men found the departments foolish, and the best of senior scholars, seeking the company of these bright young men, were forced to agree. So the real powers of the departments were gradually eroded, and while they remain, in most of our older universities today, as useful instruments of decentralization and of administrative tidiness, they spread no terror in the heart of any student or assistant professor.

### THE CRISIS OF 1963

III. THE mention of administration brings us to the third of the lost distinctions of the last fifteen years—the distinction, so painfully prevalent in 1960, between the administrator and the professor. You will remember the vogue in the 1950s of what was called Parkinson's Law, under which, as it applied to the life of universities, one could expect that administration would multiply, while scholarship and virtue declined. And indeed administrative staffs did increase very rapidly in those years. Most of the time, I think, these increases were a practical necessity (but here, of course, my own bias as a former administrator may be apparent). The process of admission, the management of financial aid, the unending search for funds, the proliferation of connections with the government, the substructure of the all-powerful departments themselves—not one of these was inevitable in itself, or deeply essential to the very process of university life, but all of them seemed urgent at the time, and those who skimped on administrative effort in any of these areas were not, in the short run, the wise ones. So the distinction was real, and its dangers were evident.

We must not be too hard on the universities of those days for their failure to find a rapid answer to this problem. The distinction between the administrator and the professor faded away only after many strange and unexpected events had occurred. Perhaps the most important was the final demonstration, in the admissions crisis of 1963, that the problem of accommodating properly qualified young men in college could be fully solved only if the enormous admissions staffs of the "prestige" colleges were themselves assigned to professorships in new institutions. Since it speedily appeared that most directors of admission were longing to be professors, the experiment was successful.

This was only the most striking demonstration of a general proposition which many administrators had felt in their hearts for years—that in any well-run place, the distinction between an administrative officer and an officer of instruction is essentially unreal. Administration too is a part of learning, unless it be badly done or unnecessary, and as this truth was demonstrated in a few unusual places, in a time when good men were very hard to get, it began to spread with extraordinary speed. And for the numerous professors who had always had some interest in managing affairs it was a satisfaction to find that what they had been taught to spurn as "administration" became a fruitful part of their whole lives when it was merely one more element in a unified professional existence.

### THE NEW HOME

IV. THE greatest change of all—though still the least complete—was the gradual weakening of the line between membership and nonmembership in the university community itself. In 1960, of course, you were either a teacher on the payroll, or a student, or (in a much more distant and less significant way) an alumnus—or you were nothing. Moreover, when you ceased to be a student, either by taking or by failing to take a degree, you went your way, and if you went off the teaching payroll, by resignation, failure of reappointment, or retirement, your connection with the life of the place became either exiguous or nonexistent. This perhaps was the most wasteful of all the patterns of action of our

---

## *Investment for the Atomic Era*

FALLOUT does not kill trees, so far as we now know. I further believe that the only 100 per cent hedge against inflation is acreage with growing trees and fireproof apartment buildings.

Householders who have no basements should build a fallout shelter in the back yard of concrete blocks covered with boards and about three feet of dirt and properly drained; otherwise there should be a hand pump to keep it dry. The floor of the shelter should have some place provided for the deposit of human excretion; therefore each shelter should contain a shovel and a can of Borax. One final thought: I advise readers to be sure, before taking or renewing a mortgage on any property, that the house has some sort of fallout shelter.—Babson's Authentic Release, June 16, 1960, Babson Park, Mass.

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universities, and the one which most obviously did violence—as we now so easily see—to the notion of learning as a proper, continuing, and central activity of man. Why should his graduation have cut off a promising chemist from any connection with our laboratory? Why should a man's graduation from law school and entry upon his profession make him no longer a member of a law school?

These questions, which could be reduplicated in varying intensity up and down the university, could not be answered effectively until money and leisure, in fruitful combination, produced both the possibility and the desire for continued connection across a really wide sector of the adult population. Then it began to appear that the university, properly construed, is not merely a place of full-time effort by young students and old professors—it is also a home, for hours, or days, or weeks at a time, of all highly civilized men. Our older universities have found this truth hard to pay for; only a happy few, so far, have had the luck to find the extraordinary new resources which this new concept requires. But our public universities, connected as they are to the full political force of public opinion, have been able to win new appropriations, and the more adventurous of them have begun to show us how radically the whole nature of the university can be transformed, and how sharply its purpose can be clarified to all its members, when this wider concept is accepted. Of course the criterion of continued membership is seriousness, and there can be no room in this promising new development for sloppy or second-rate or merely casual work. But these reminders are not necessary for an audience in 1975; they belong rather to the tired and irrelevant debates in which the real meaning of this opportunity was being missed during the 1950s.

Well, gentlemen, I have talked too long, and so I have not time for even the most cursory review of the detailed history processes by which these four great changes came to pass. It is enough to say, in summary tribute, that we are about equally indebted to two pairs of leaders—first, those who began our two great new Federal Universities in Washington, D. C. and in the Pacific mountains during these years, and second, those in the two of our best-established and greatest institutions which at the same time were not afraid to remake themselves. It was the combination of revolution among the strong and innovation among the new which was basically responsible, as we can now see, for the happy turn in our higher learning which we have gathered to celebrate. No one could have predicted, ahead of time, whether the new or the old would do better, and it was a happy thing for our society, in the early 1960s, that both bets were made at once. ??

### CLERK AND KNIGHT

BUT my analysis so far has been much too narrow, for all these changes could only have happened in the context of the great general events of the last fifteen years:

Our very survival.

Our mastery of space (not, of course, the relatively trivial problem of outer space but the management of our own acres).

The revolution that has brought about enormously improved teaching in the secondary and private schools.

And, most fundamental of all, the rediscovery of the high purpose of man as a living, loving, thinking, and acting moral entity which surely has been the decisive accomplishment of our society since 1960.

All these things—and many more—inevitably have had an enormous immediate impact on our university life. Consider only how the battle for survival ended forever the gap between clerk and knight which was so bad for both—or how the new morality has, among other things, reunited "the two cultures" first defined by Lord Snow (and of course we have all joined in applauding his recent re-election as President of the International Association of Philosopher-Kings). Consider—more broadly—how the academy has been charged with new energy by its central—though not controlling—part in the acceptance of change itself as a necessary part of existence. What our predecessors of the 'fifties and early 'sixties preached without quite believing, we now have learned to live by—without the need to preach.

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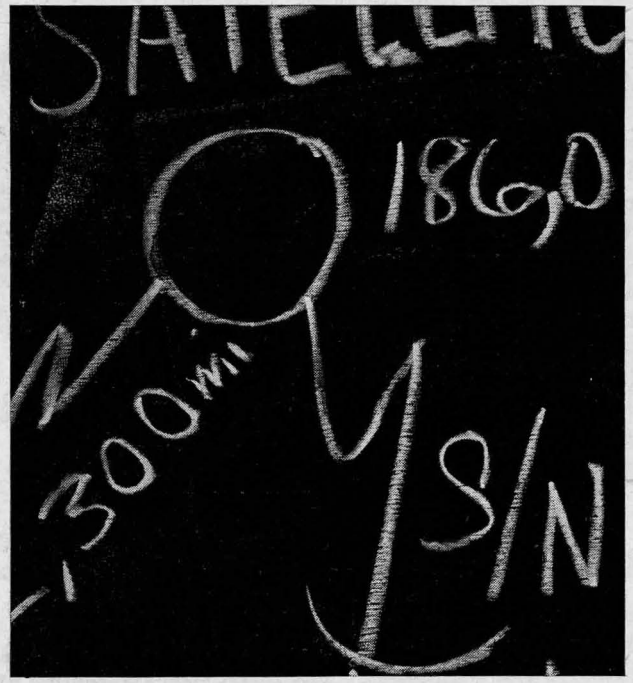


**EXCITING** Never before have people been able to communicate over such great distances, at such high speeds, and in such efficient ways. And no one has contributed more to this exciting Twentieth Century phenomenon than the scientists and engineers of ITT companies. Some few examples: For instantaneous visual transmission of records, documents and all printed matter, an ITT company has developed a slow-scan television device known as Videx. For NASA, ITT has designed and built complete solar power conversion devices for satellite communication on lunar expeditions. And for the Strategic Air Command, we are completing a worldwide automated system of instantaneous control and command!

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8/19/62

Rabi I.I. Nobel Laureate.

Amer. grad school unique in world + second to no other educ. instn.

"group effort" raises stds of excellence for the many - does not preclude to lone worker.

Friends + coop = new Amer. excellence.

Goldman says humanists + others say we are levelling - no excellence.

Europe still cherishes 'indiv. work'.

Rabi (speaking as a Jew?) says our system best of because the many have the opportunity + the excellent emerge from the prevalence of opportunity

Goldman - Sep. intellect from technologists

Rabi critical of Amer system of educ. only because of seperation of colleges + grad schs.

Reasons - time takes to get in to top level - merge then - give great educ at younger age. Specialize earlier.

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Goldman - talk about p students who are incapable of absorbing a college educ. Cites his bulto grandson sub sequent + sequence of parents - now could be born.

~~Robi talk~~

Goldman

Demo crucy - effects on intell life

stultifying of leveling -

"God has created you equally but has fashioned you differently" Robi quotes Plato.

Threats - (1) Ike's military - industrial hegemony - Robi talked scientists

(2) We are unaware of our precious heritage - take it + its gone -

(3) Secrecy - overdone in some fields

Some parts of our syst but how enough knowledge of what confronts us to take grad part - eg press T.V. universities - etc must be well informed. Plunging in distortions.

Goldman says apathy of people is not apathy but depart than consciousness of ignorance.

Pursuit in Robi

Robi. Emphasizes experience at 9 of discovery Copernican theory - Earth

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revolving in fixed axis + around sun - days, years seasons, etc - gave him a feeling of certainty of belonging -

Badness of early sc. educ. during his youth was stimulating + depressing - young men in his youth went to Germany. Eg. Bohr in Copenhagen 30-40 youths went over at about same time - Became friends - but disconcerted that had to go abroad to learn. Excellence came slowly to US in beginning - now we are on road to insist on excellence.

Point of view - tradition was important diff betw Europeans + Heisenberg + his companions - Matrix of culture - His info. was as good as better - Their pt of view was better -

Quantum physics has not been penetrated yet - We haven't yet begun to understand implications of quantum physics + haven't even penetrated physics yet.

Quantum physics will bring intuitive revol

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(Spiritual) Physch. brought.

"We are forced by the phenomena to look on the world differently". We can't now think that Sc. can't predict the physical future. An element of probability — of statistics — arises. Intro. of probability instead of certainties.

---

Atomic bomb doctrine was understood by very few people — + prac. none — by as factor of chg's civilization.

Conditioning from learning of math + sc. adventure nec. to some understanding of what a scist says + means. Rabi: public tends to classify all scists in 1 same level — brill. fool + brill. wise man.

Too much prestige unaccompanied by understanding attached to public attitudes toward scists —

Rabi — it is not diff for a scist to become a "generalist". Be rounded.

Goldman: is sc. discipline w/o values?

Rabi: Sc is full of values — not loose

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Goldman - then you don't see chasm betw sciist + non-sciist.

Rabi - think sciist has had a larger amt of humanistic educ in living life - whereas non-sciist does not have visceral feeling abt sci. In future educ must bring sci + humanist together in children so men will speak out of same culture.

Rabi with GAC of Arms Control Agency

If arms race continues at rate of pace of last few yrs war will result - accidentally or premeditatedly -

Such a war will be end of us as nations - of culture - What wd be left - little in Northern hemisphere - some in So Ham. Humanity possibly could not continue.

Abt US - People who concentrate on an Army + fail concentrate on value of the civil - of country are "bad counsellors". U.S. not comparable w/ Russians

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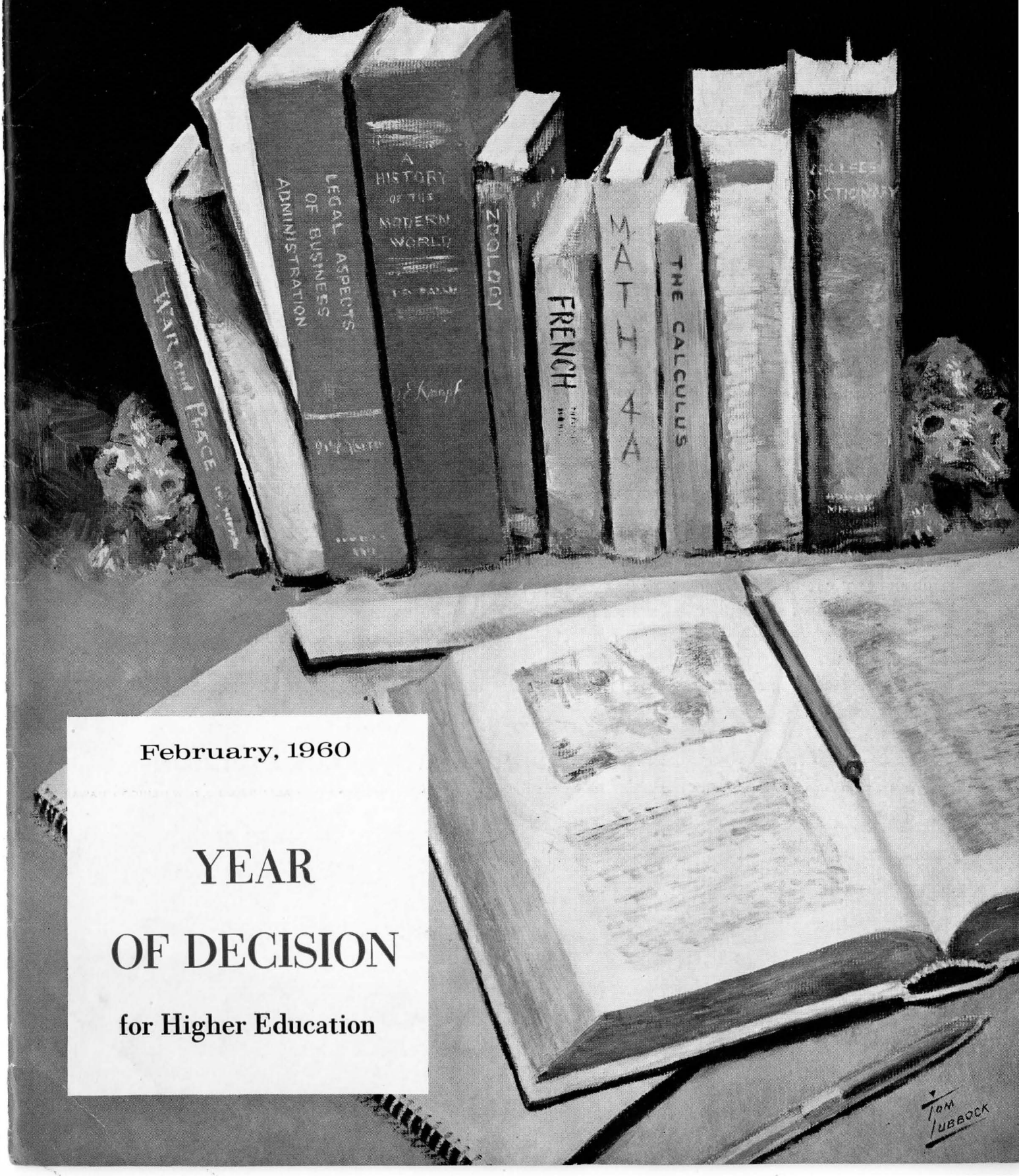
We have assumed the leadership of world - it is up to us - If arms control is way to do it we shd concentrate on it as #1 problem. Longer we wait prob arms control becomes more difficult. We are not giving enough attn to arms control compared to other help arms - other probs. Our resp. as richest & best educated people

Not easy prob but not insoluble. If we looked upon ourselves first & decided what we want to achieve - priorities - etc. Hate campaigns distort our personalities.

On educ. Rabi wrote agree w/

Beatric
From th

# California Monthly




February, 1960

## YEAR OF DECISION

### for Higher Education

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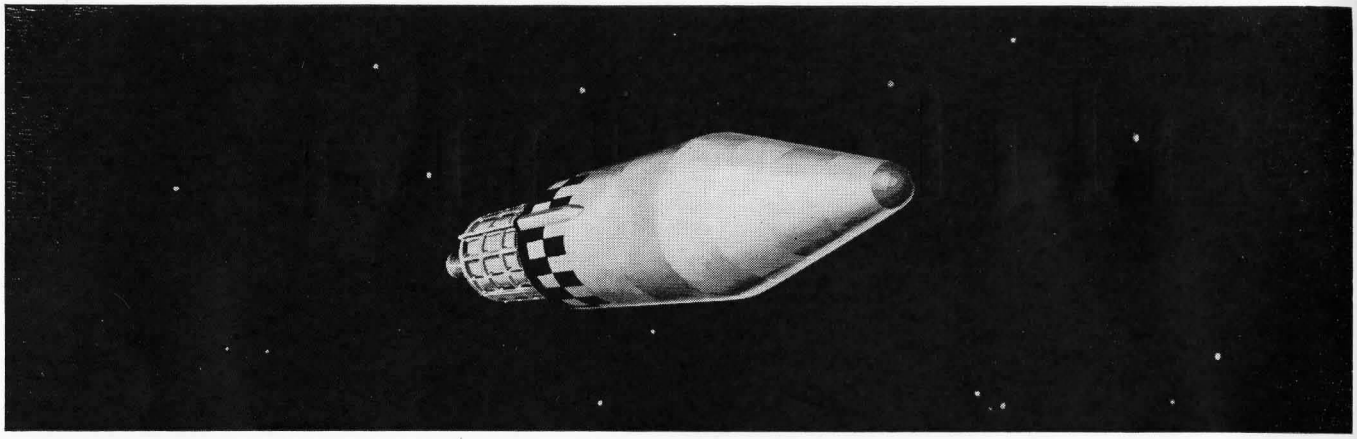

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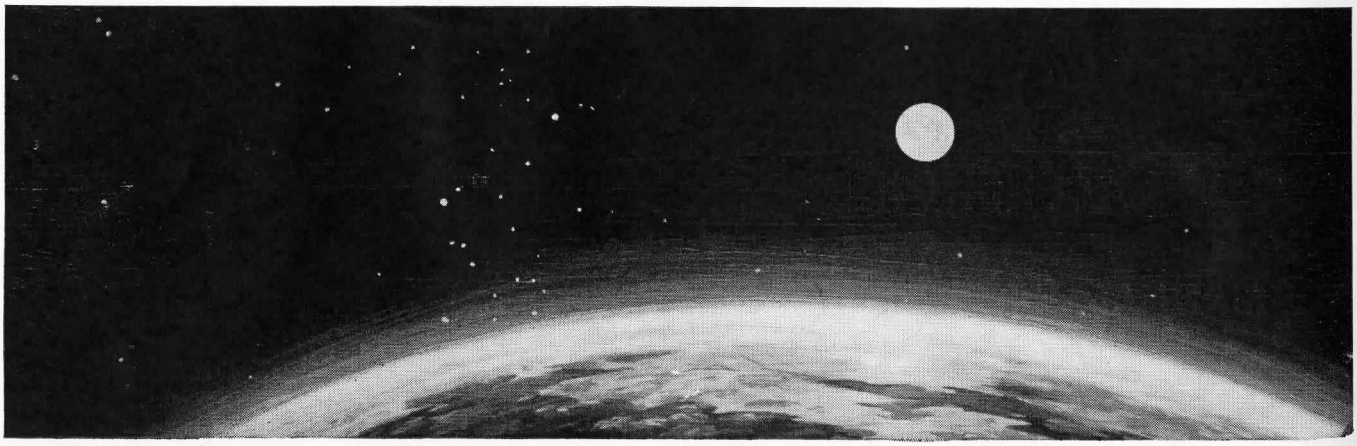

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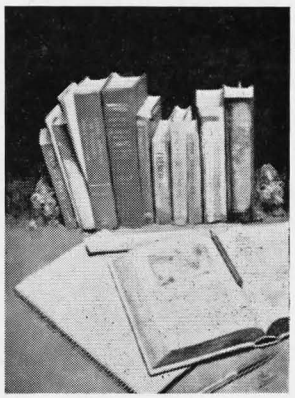

Tom Lubbock's oil painting of the student's work bench is an appropriate symbol of what is at stake in California's Higher Education.

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**4** *Summer Recreation Developments*

The Tahoe Alumni Center joins the famous Lair of the Bear as a recreation spot for alumni and their families.

**9** *Year of Decision*

The story that has to be told about California Higher Education in a year when a Master Plan for its future faces the test of Legislative scrutiny and public approval.

3 EDITORIAL

25 UNIVERSITY PANORAMA

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## *Editorial*

# Reviewing Admissions Policy

IN RECENT weeks the admissions policy of the University has been under close public scrutiny in the press. Unfortunately, a good deal of misinformation seems to be circulating. Accordingly I have looked into the history of our admissions policy to see how the present system evolved.

Originally, the Regents set the "Moral and intellectual qualifications for admission." This job was formally transferred to the faculty in 1885. Examinations were oral until 1881 when written exams in algebra and geometry were given to students in agriculture and mechanical arts, and language exams were given to Letters students.

From 1884-1917 a high school principal's recommendation in a field resulted in the waiving of an examination in that field. From 1919 to 1931 an over-all recommendation by a high school principal resulted in exemption from all examinations.

The present-day standards of admission were instituted in 1931. In essence, at that time, a student had to have a high school record of eight units of A or B grade work in ten required subject areas. When senior high schools objected to the inclusion of the 9th grade, the policy was changed to require a B average in the final three years of high school. That was in 1933.

Except for minor adjustments to provide for students not originally planning to attend the University, and for junior college transfers, the University's admissions policy has remained basically the same to this day. Of course the number of students desiring a college education has increased and this has been reflected in increased competition for admission to the University. At present approximately 15% of our high school graduates are eligible for admission to the University.

The question now, is can we continue to take the top 15% in spite of the fact that the number of qualified students who want to come here is constantly growing? The Master Plan Survey Team, examining California higher education for the Regents of the University and the State Board of Education, suggests that this 15% figure will have to be dropped to 12½%. In order to allow for the "late bloomer" and for extenuating circumstances, it has been recommended that provision be made for admitting up to 2% of the entering class who may not meet the standard requirements.

What effect will the Survey Team's recommendations have? For one thing they will tighten our present requirements. For another they should make even more students realize the necessity of starting early if they want to qualify for admission to the University. The years in grammar school and junior high school are becoming more important. It must be explained to these young people the things they must do to qualify for University admission so that those with ability will qualify when they graduate from high school.

The University needs both scholars and leaders among its students. It is famous for both the academic attainments of its faculty and for the leadership possessed by its alumni. The necessary balance between the two will be maintained just so long as talented young people are given the necessary counsel so they may qualify for admission to the University.

*Richard E. Erickson '49*

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# Exciting Developments for the Coming Summer

MEMBERS of the California Alumni Association will have good reason to chalk up 1960 as an historic year. Beginning this summer, the Association's recreation and education programs at Pinecrest will be augmented by an exciting new development to be launched at the new Tahoe Alumni Center about one-half mile South West of Tahoe City.

The new center, now under construction, should be ready for its first alumni guests on opening day, July 1. It features a central lodge, motel-type accommodations for about 150 alumni and their families, a swimming pool, dining room, small amphitheatre for educational and entertainment programs, and recreation facilities. Designed for year-around use, it will be in operation approximately nine months of the year with programs designed to take the best advantage of both summer and winter conditions in the beautiful Tahoe area.

In the summer, the program will feature weekly visits by members of the University faculty or administra-

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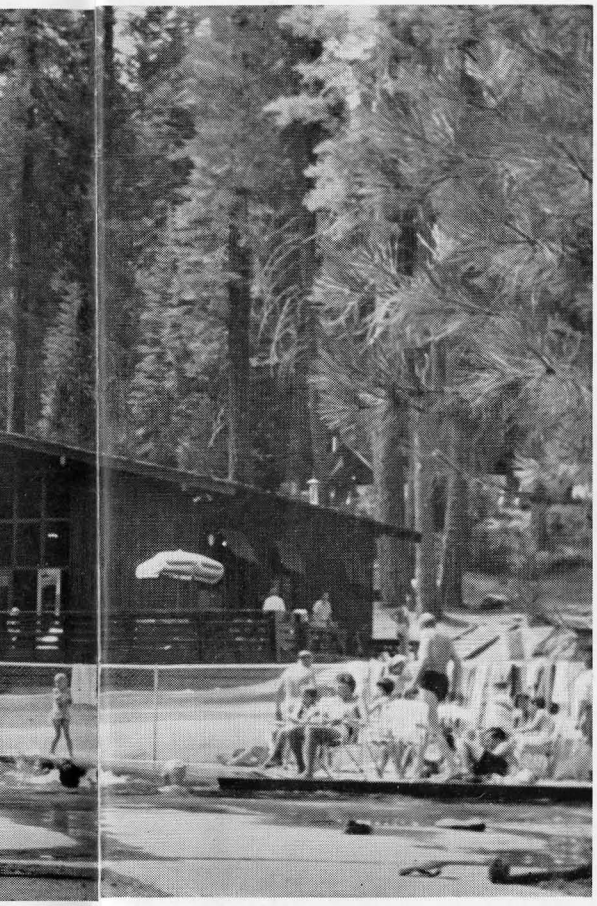

*The Tahoe Alumni Center will augment the famous Lair of the Bear as a recreation center for California Alumni this Summer*

tion to provide informative discussions on topics of current interest to alumni. Recreation directors will plan programs for all age groups. The program will make available opportunities for swimming, boating and fishing at the lake, fishing in nearby rivers, horseback riding and golf. At the Center itself there will be swimming in a heated pool, and facilities for volleyball, tennis, badminton, horseshoes, table tennis and, eventually, softball. Evening programs, year around, will include dancing, movies, songfests and trips to nearby points of interest. Winter recreation will of course include skiing—both at Granli-Bakken, ski lift facilities just a stone's throw from the Center and at Squaw Valley, Sugar Bowl, Heavenly Valley and Mt. Rose within easy driving distance. Ice skating facilities will be available for alumni at Squaw Valley both winter and summer.

This summer will mark the twelfth season for the Association's family summer camping program at the "Lair of the Bear" near Pinecrest in the High Sierra about 30 miles above Sonora. There are now two virtually identical camps (Camp Gold and Camp Blue) in operation at the "Lair." They feature extensive recreation and educational programs for the entire family. Accommodations are of the tent or tent-cabin variety, with meals served in a large open-air dining hall for each camp. Both camps have heated swimming pools, tennis courts, volleyball and badminton courts and facilities for table tennis and horseshoes. For the smallest members of the family, there are "Kub Korrals" where members of the staff supervise play and instruct children in arts and crafts. For everyone, there are nature hikes, horseback rides, excursions to points of interest in the area and fishing expeditions.

Teen-agers have programs of their

SNOW LADEN residence wing of the new Tahoe Alumni Center which will begin year around operations near Tahoe City on July 1, 1960.

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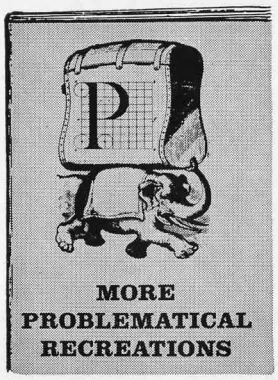


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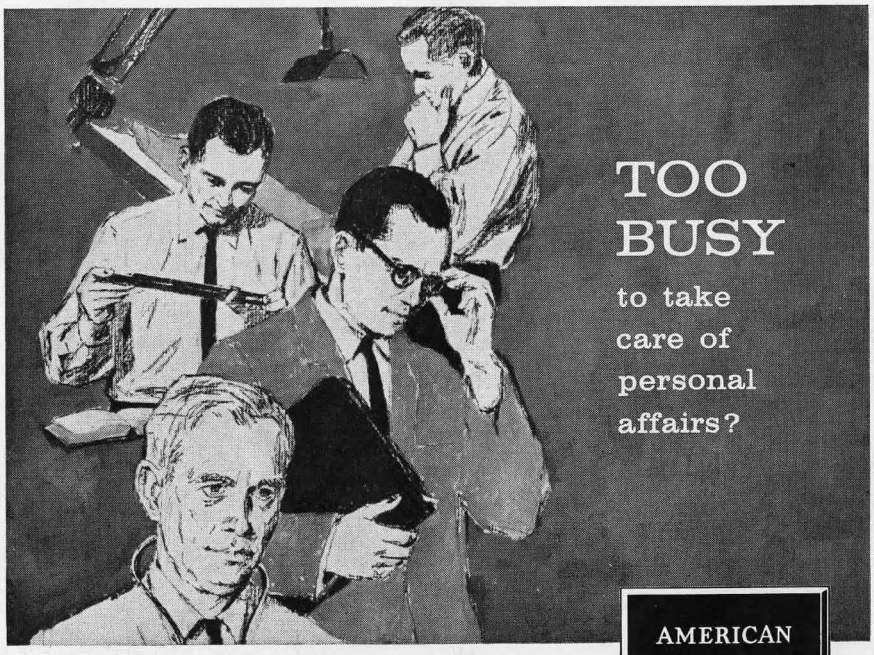


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Both the Tahoe Alumni Center and the Lair of the Bear are under the general direction of Mike Koll, the Association's Education and Recreation director. He has directed the Lair's programs for 11 seasons, attended by nearly 6,000 alumni in recent years, with many more on the waiting list by season's end.

Reservation forms for both the Tahoe Alumni Center and the Lair of the Bear will be mailed to members of the California Alumni Association by the end of February. They will be accepted March 1. Rates for the Lair of the Bear will be $42.50 a week for adults, $22.50 a week for children between the ages of 3 and 12 and $8.00 a week for children under three years. Alumni who are not members of the California Alumni Association are subject to a $5.00 program charge. Rates for the Tahoe Alumni Center will be $14.00 per day or $90.00 a week for adults, $8.00 a day or $50.00 a week for children between the ages of 3 and 12 and $1.00 a day or $7.00 a week for children under 3. Dormitory accommodations are available for $9.00 a day or $63.00 a week. All rates at both the Lair and the Tahoe Alumni Center include meals. ◀

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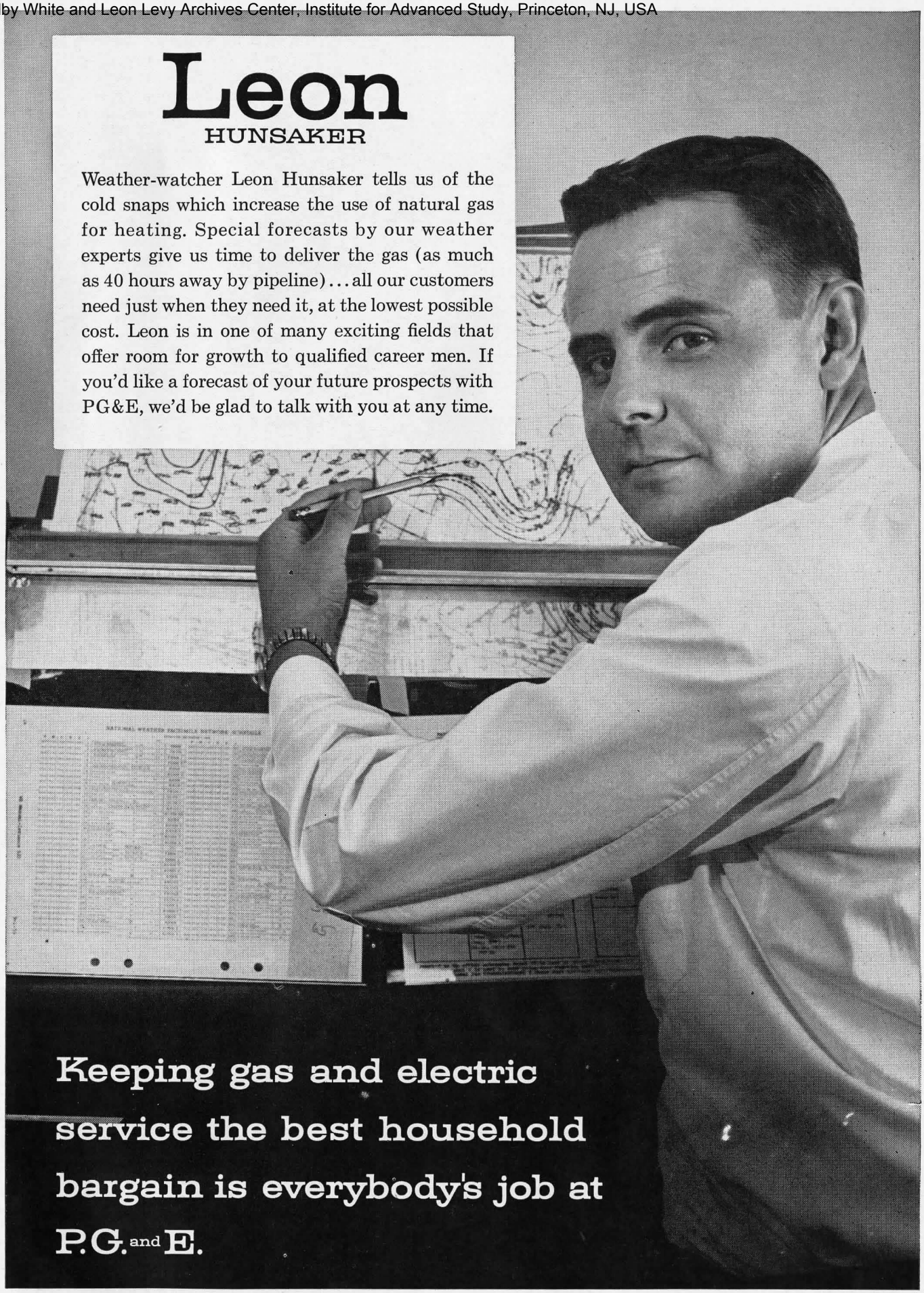


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# Year of Decision

FOR CALIFORNIA HIGHER EDUCATION

This is a story that has to be told. It is about higher education in California in a year of decision. Beginning this month, the Legislature and the people of the State will give consideration to a Master Plan for the future of our junior colleges, colleges and University. The outcome of these deliberations will determine whether there will be enough educational opportunity for California's young people – and how good it will be.

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YEAR OF DECISION-I

# The Pattern of an Ideal

AS A SPAWNING GROUND for distinguished colleges and universities, Gold Rush California was as unlikely a place as any. Life was raw and turbulent. Most of the people (about 100,000), were gold seekers. There were relatively few women and children. Nothing but a vision of what California was yet to be can explain why delegates to the Constitutional convention in 1849 were inclined to discuss education at length and go so far as to make arrangements for legislative protection of lands that might be granted for a state university where "literature, the arts and sciences" might be promoted.

In the State a-borning were vast riches in ore and timber in the great mountains; agricultural abundance in the long, broad valleys, and bright opportunities for commerce beside the magnificent ports and waterways. Only human resources were lacking to bring culture and civilization to the land and fulfill the destiny of California.

People did come. Within the first two decades of Statehood, California's population increased from 100,000 to seventeen times that many. And the people haven't stopped coming since.

Colleges and universities, catalysts of progress and civilization, came too. In the 1850's private academies, seminaries and colleges sprung up. Among the first were the University of Santa Clara, 1855; California Wesleyan University (later College of the Pacific), 1852; The Young Ladies Seminary in Benicia (forerunner of Mills College), 1852; and the Contra Costa Academy (first antecedent of the University of California), 1853.

CALIFORNIA'S THIRD SUPERINTENDENT of education, Andrew Jackson Moulder, saw clearly that California could not forever import teachers for its public schools. He sought and won a $3,000 appropriation for the establishment of a State Normal School in San Francisco. It opened on July 21, 1862 with an enrollment of "five young ladies and a gentleman." When the citizens of San Jose offered a 26 acre campus, the school moved in 1871 and resumed operations as what, after a series of name changes, became San Jose State College. By 1889, two more state normal schools were established. In the next 25 years six more were created. Course offerings expanded. In 1921 the "normal schools" became Teacher Colleges. Two years later, they were authorized to offer the bachelor degree for four year teacher education. More liberal arts courses were added and the time came when non-education students could receive a full college education. And the Legislature in 1935 decided the institutions would be more appropriately called state colleges.

After World War II, the seven state colleges faced the same problem higher education faced all over the country—enrollments swollen by returning veterans. The legislature established two new ones. When the departure of G. I.'s failed to change the prospects of rising enrollments, the legislature established five more.

Today, California's fourteen state colleges have a combined full-time enrollment of 44,000 students and offer, in addition to teacher education, courses to develop responsible citizenship, occupational competency at the four- and five-year levels and community service.

UNTIL 1868, CALIFORNIA'S efforts in public higher education were restricted to teacher education. In that year, however, the hard work of the band of men who had espoused a state university from the years preceding Statehood brought results. At Oakland and, later, at Berkeley, the University of California was established. The scope of its functions was broadly conceived, but not without opposition. In the early years, certain political and special interests would have preferred that the University assume responsibility for a rather narrow curriculum

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emphasizing agriculture and the mechanical arts. Perhaps, more than anyone else, Daniel Coit Gilman, third president of the University, waged the bitter battle for University education as it is known today. In his inaugural address in 1872 he described the young university this way: "First, it is a university . . . not a college, nor an academy of sciences, nor an industrial school . . . the University means more than any or all of them. The university is the most comprehensive term which can be employed to indicate a foundation for the promotion and diffusion of knowledge—a group of agencies organized to advance the arts and sciences of every sort, and train young men as scholars for all of the intellectual callings of life." He saw the University as also uniquely Californian: "It must be adapted to this people, to their public and private schools, to their peculiar geographical position, to the requirements of their new society and their undeveloped resources."

President Gilman soon tired of the quarreling that persisted over the University's functions. He became weary, too, of developments which seemed to promise political domination over the University's destiny. He resigned in 1874 to develop at Johns Hopkins the ideas he advocated in California. But behind him, he left a shining ideal for the University to live up to and his leaving dramatized, perhaps, the notion that to be great, an institution of higher learning must be independent of partisan political influence. In 1879, a new Constitution of the State provided the University with political independence under a board of Regents.

Today the University offers undergraduate and graduate courses on seven campuses and two more are to be established. It has two medical centers, three law schools, an institution of oceanography, two major radiation laboratories (and operates a third, Los Alamos, for the Federal government), an astronomical center at Mt. Hamilton and scores of experiment stations and laboratories located throughout the State. Its total enrollment in 1958 was 43,000 students.

BOTH THE UNIVERSITY OF CALIFORNIA and the state colleges receive direct financial support from the State treasury. The junior colleges receive 70% of their financial support from local school districts. Though not uniquely Californian, junior colleges have flourished here as they have nowhere else. They began with legislation enacted in 1907 which permitted high schools to offer two years of post graduate training. The first one started in Fresno in 1910. Legislative action through 1921 gradually strengthened their position and in 1928, Will C. Wood, then a former Superintendent of Public Instruction, observed, "The State is now committed to approve the establishment of a junior college in each community that wants the institution, provided the community has students enough to justify it, wealth enough to support it, and a will strong enough to have it." By 1960, there were 64 junior colleges in California. The largest of them has an enrollment exceeding 8,000 and their total full-time enrollment today exceeds 90,000. The education code makes junior colleges responsible for lower-division pretransfer education; vocational and technical education (usually designated as "terminal"), community service and adult education.

Private colleges and universities have continued to develop. Among the 72 such institutions in California are some of the nation's most respected centers of higher learning. They had a combined full-time enrollment of 49,825 in 1959 (about 20% of the State's total higher education enrollment). Each has developed educational programs of a special character. There are the full-scale universities like Stanford and the University of Southern California. There are religious-related and affiliated colleges and universities where heavy emphasis is placed on the liberal arts such as St. Mary's, University of Redlands and Occidental. And there are schools that emphasize science and engineering like California Institute of Technology. They are governed by their own private boards of trustees and receive virtually no direct support from State funds.

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California's institutions of higher learning, some 148 public and private campuses in all, evolved naturally and inevitably as the destiny of the State unfolded. They have played an unmeasurable but important role in the development of California's natural abundance and the cultivation of her human resources. The development and support of higher education is, itself, one of California's finest achievements.

PERHAPS NOWHERE ELSE in the nation is the democratic ideal that education should be available to all citizens, to such levels as they are able to pursue it, as fully realized as it is here. Virtually every high school graduate can attend a junior college. About 45 per cent of them are qualified to enter state colleges. Nearly 15 per cent are eligible for entrance to campuses of the University of California. Educational pathways are open to virtually every conceivable vocation, occupation or profession. All three systems offer courses in the humanities and the liberal arts to such levels as their facilities and faculties permit. Those students seeking education with special religious, cultural or other emphasis may enter the State's independent colleges or universities. This diversity provides prospective students with tremendous flexibility in their choice of a college or university. Whether intellectual ability, geographic proximity, suitability to career goals or financial resources are a consideration, higher education of quality is available. Moreover, once enrolled, students making proper progress can transfer easily from one system to another.

Perhaps most important of all, California has stubbornly protected another concept—that for residents, tuition should be free in public supported institutions. Thus California's young people have higher education opportunities regardless of economic circumstances. Just to make sure, in 1955, the California legislature established State scholarships to award up to $600 to 640 new students each year to be used for tuition at any institution of higher learning, public or private, within the State.

California has accomplished what many other States are still struggling for—provision of ample, diversified top quality free educational opportunity through the doctorate level in a systematic, fundamentally economical way. Californians should be proud of their accomplishment. But the decades ahead threaten the good work that has been done. Increasing enrollments, problems of financing and weaknesses in coordination threaten to create pressures during the 1960's and 1970's that can wreak chaos out of the promise of excellence.

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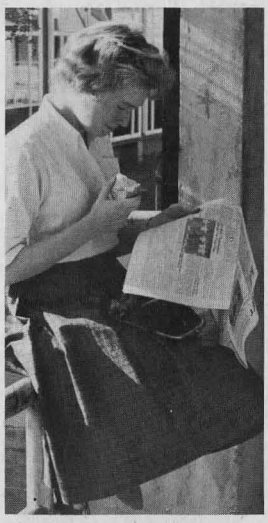

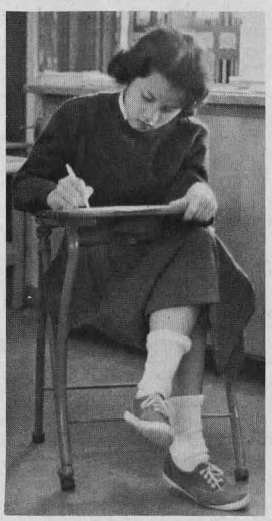

*Photos by Jon Brenneis*

YEAR OF DECISION-II

# Six Students Choose

TALK ABOUT HIGHER EDUCATION, particularly in the diversity with which it presents itself in California, requires reference to things somewhat remote from the work of teaching and learning that is its essence. You have to talk, for instance, about functions, surveys, boards, policies, appropriations and capacities. The students and students-to-be seem anonymous, and, apparently—though not really—shadowy figures in a vast audience before which the show is performed.

In 1958, California's high schools graduated 114,107 students. By 1975, there will be more than that many in Los Angeles and Orange Counties alone (158,000). In the same year, there will be 316,000 high school graduates throughout the State.

These are the people we're really talking about when we tell the story of higher education in years to come. They deserve the scrutiny of a close-up. To obtain it, the editors visited Drake High School in San Anselmo and talked to students who would be heading for college this Fall. Their observations on higher education are naturally devoid of concern for differentiation of function, coordinating councils or campus priorities. But their enthusiasms, and ambitions, personal though they may be, are in the end, at one with society's. And they, and others like them, have most at stake in the big decisions that will be made in higher education this year.

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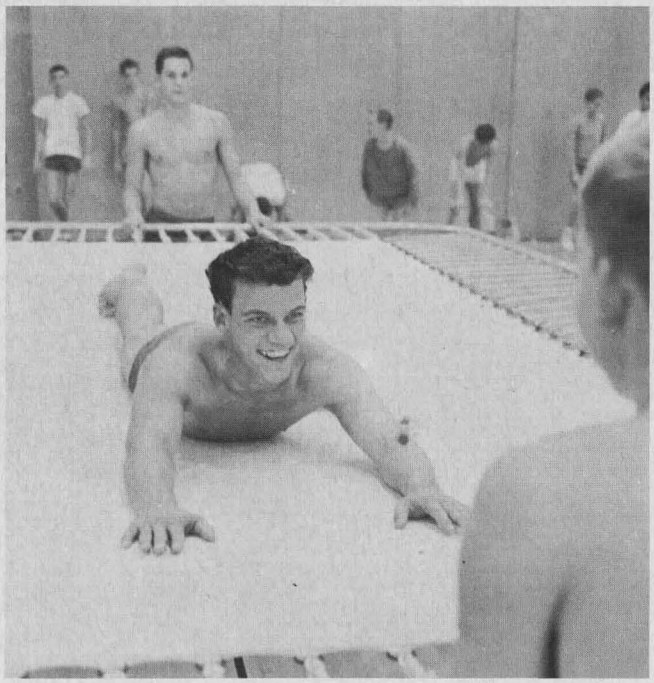
*Janet Berry* hopes to be a writer of children's stories. She reads a lot and likes to learn. "I'm not going to college for a diploma; I could do without that. It's just nice to know things." Her B average gives her a wide choice of schools and she considered the University, Willamette and College of the Pacific before settling on San Francisco State College "because it has a very good English department."



*Frank Divita,* an outstanding trampoline artist, also shines in football and baseball. Music is his serious interest, however, and he is an accomplished accordionist. He plans to become a music teacher eventually but chooses nearby Marin (junior) College to start his education following high school. It will give him a chance to earn money (teaching accordion), and bring up his grades so he can finish college elsewhere later on.

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*Carol Franchini,* left, shares the Drake newspaper with classmate Diane Kliforth during lunch on "second corridor." Carol has a sister at the University's Berkeley campus and plans to join her there this Fall. Her choice is not entirely a matter of following suit, however. She also likes the variety of courses offered by the University and the fact that it is "inexpensive and close to home."

*Diane Kliforth's* father is a correctional officer at San Quentin. She has a "low B" average and "it would be a financial strain on my parents to send me away right now." So she's going to College of Marin. "My brother started at Marin and then went on to a degree at Cal and a Master's at UCLA. I think two years in a junior college give you more time to find out what you really want to do."

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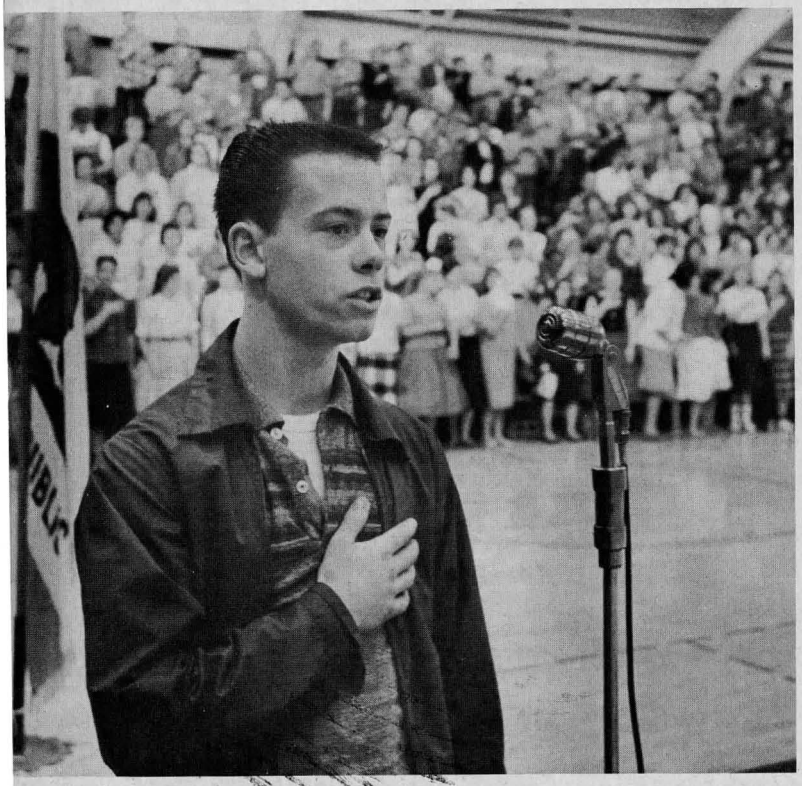
*Norma Jean Fong* helps her mother at the check-out stand in the family's market in Fairfax. "On weekends, when David's home, we all pitch in," Mrs. Fong says. David is a dental student at the University and Norma plans to follow him at Berkeley. A younger brother, Larry, is a freshman at Drake. A co-editor of "The Buccaneer," Drake's yearbook, Norma plans to major in English and eventually to teach. She has maintained an A-minus average in high school.



*Richard Sater* is Drake's student body president. For years he has put aside ten per cent of all money he earns (this year at Woolworth's), toward college. "You are nowhere without college," he says. "You need a degree to get any good job." He's planning to study business administration and public relations at San Jose State College. "They have good business connections and can get you started in a good job when you graduate. And I've heard they have a good public relations course." Richard's dad is a well known bay area radio and TV announcer.

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YEAR OF DECISION-III

# An Ideal in Trouble

IT HAS TAKEN CALIFORNIA more than a century to come as close as it has to approaching the ideal of a public system of education. All the more sobering, then, is the thought that starting this month, decisions must be made that will mean the difference between continued progress and utter chaos in our junior colleges, colleges and universities.

America's emergence as the leading power of the western world made its people properly self-conscious about their cultural, intellectual and technological attainments. The impact of higher education on social progress was no longer taken for granted. College degrees became increasingly important as credentials for the better jobs in business and industry. Demands for excellence in education—though no college administrator would willfully strive for less—became more vociferous. Sputnik turned up as an uninvited guest in the vocabulary of the educational orator. And the new national attention on higher education brought the inevitable "suggestions," "reforms" and "solutions."

In the light of sincere public interest, the leaders of higher education in California and elsewhere in the Nation have had an unusual opportunity to execute plans for historic progress . . . except for one thing. Simultaneous with America's emergence as a world power, simultaneous with new demands for excellence of education, simultaneous with an invigorating public interest came staggering predictions of huge enrollments that would swamp campuses left unprepared by the growth-stunting war years.

FEW OTHER STATES have given the problem the continuing attention California has. Since 1945 a Liaison Committee of the Regents of the University and the State Board of Education has kept a watchful eye on enrollment predictions. The latest study, just completed in December, 1959, predicts a full-time enrollment of 661,000 students in California's junior colleges, colleges and universities by 1975—just fifteen years from now. Most of these students are already in California's elementary and high schools. They are the products of increasing birth rates and immigration which, together, add 1,600 people to the State's population every day.

Most of the increased enrollment must be accommodated in California's public higher education systems. Private colleges and universities, supported by endowments and the generosity of friends and alumni, simply don't have the financial resources to expand to take more than half again as many students as they enroll now (about 71,000 in 1975). As the president of one private college put it, "There isn't enough private wealth on the entire West Coast—the East Coast either, for that matter—to permit California's independent institutions to do much more than we're doing already."

Limiting enrollments at public institutions through higher and higher entrance requirements is no solution at all. It coldly rejects an ideal California has found worthy of support for more than a century—that education to the highest level of individual ability should be available equally to all citizens. Reversing this policy would be foolhardy, as a matter of fact, because it would deprive the State of unknown numbers of educated leaders at a time when increasing populations and the problems they create for the State make it imperative that we have and hold every talented and knowing mind available.

If nothing is done, however, the junior colleges will run out of student capacity between 1965 and 1970. Capacities of the State colleges and the University will be exceeded between 1960 and 1965. If these are overstrained, standards of educational quality will deteriorate.

Gordon Sinclair, managing editor of the *Santa Cruz Sentinel,* who has written a series of well-informed articles on the subject, sums up California's problem

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well: "We should have started five or even ten years ago."

EVEN IF WE get started now, it will be hard to make the grade. State Senator Hugo Fisher of San Diego has expressed a common legislative sentiment: "It takes just so long to do things. We can't go much beyond public understanding and public understanding of California's Higher Education problems has come late."

One of the reasons public understanding has come late is that there is so much to understand. Within the three systems of public higher education there are 86 campuses and four more on the way. Each of the three systems has its unique origin, pattern of administration and educational function. There are also differences in the autonomy enjoyed by individual campuses or colleges. Efforts in coordination, dating back to 1899, have been valiant, at times successful, but, on the whole unsatisfactory.

One of the most difficult coordination problems is to minimize wasteful duplication of educational programs. Some duplication is inevitable and desirable, of course. All three systems of public higher education must offer broad liberal arts programs, for instance. Less justifiable, however, would be extensive vocational arts programs at campuses of the University; medical schools at the state colleges, or four-year business administration courses in the junior colleges.

Such duplication has been present in the past. Until a few years ago, the Davis campus of the University of California offered a two-year vocational agriculture program that a team surveying higher education six years ago regarded inappropriate to the University.

Both the state colleges and the junior colleges are under considerable local pressure to establish courses geared to local needs. A state college in a highly industrial area may be urged to expand its technological curriculum. Popular concern over the space race with the Russians no doubt helped state colleges to win authorization from the State Board of Education to offer a master's degree in engineering, despite previous agreement that engineering education beyond the baccalaureate degree is a function of the University.

THE MOST NATURAL and obvious reason for unsuccessful coordination of the education programs of the three systems, however, is the failure on the part of the public, educators, legislators and others who influence educational policy to realize that to be different in function is not necessarily to be different in quality. T. R. McConnell, chairman of the Center for the Study of Higher Education at the University of California, in a foreword to a survey of coordination efforts in higher education throughout all of the United States, says: "There seems to be a kind of 'pecking order' of public prestige (and faculty valuation) among higher institutions . . . faculties are almost certainly striving to approximate the educational values they associate with some stereotype of excellence or reputation. If the faculty of the preferred institution engages in research (or purports to do so), then the aspiring faculty will press for time, facilities, and rewards for research. If the model multiplies courses and specializations, the ambitious institution does the same, often at the cost of general educational enfeeblement. If the prototype has professional schools, the advancing institution tends to establish many of the same professional divisions whether the State needs them or not."[1]

The "pecking order" principle at work in California is seen in the desire of some state college faculties to engage in more research activities and offer doctorates. On the citizen level, it is manifested by the comment of a Chamber of Commerce official in a town seeking establishment of a University campus nearby: "Surely there's nothing wrong with a state college, but if you're going after something you might as well go for the top." Then there's the high school senior: "Why should

[1] *Lyman A. Glenny, "Autonomy of Public Colleges" (N.Y., McGraw-Hill—1959).*

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I go to a junior college when I've got the grades to get into Cal?"

The vitality that comes through diversity and the economy that comes from assigning well-defined functions to each of its three systems of public higher education are responsible to a large degree for the strength of California's University, state colleges and junior colleges. To argue that any institution should be less good than it can be is indefensible, but California can't afford the extravagance of needless or diluent duplication as a substitute for efficient higher education.

NEEDLESS DUPLICATION is one extravagance. Another is expensive education for students who are incapable or unwilling to benefit from it. On paper, California's tri-partite system is as neat a solution to this problem as has been found. Virtually every high school graduate can gain admission to California's junior colleges where instruction costs are relatively low, and high drop-out rates are not so wasteful. Entrance requirements of the State colleges are somewhat higher, and permit the admission of the top 45 per cent of the high school graduates. At the University of California, the top 15 per cent of the high school graduates are eligible directly from high school. There is mounting evidence, however, that these percentages may be too high. Recent information from seven state colleges indicated that 55 per cent of the freshmen admitted with five recommending units, and 54 per cent of those admitted with six failed to make a "C" average in their first year. Other students indicate that while the University's basic admissions requirement (a B average in selected subjects), seems to be a good measure of students' ability to succeed, some of the alternative methods for admission do not. About 45 per cent of the students entering the University withdraw before the end of four years. There are many reasons for leaving school, but out of the 45 per cent leaving the University, about one-third have averages below a "C" when they leave.

Changes in admissions requirements must be carefully considered. When they are raised too high, "late bloomers," students who adjust slowly to college or university studies, lose their educational opportunities. If they are not high enough, they fail to discourage those who are really wilted buds.

Raising entrance requirements at state colleges and the University would tend to direct marginal students to junior colleges where they are likely to have a better chance of a satisfying educational experience. In one respect this seems to be a good idea. Junior colleges will not reach their enrollment capacities as soon as the state colleges and the University will. But this is true only in some areas. Local bond issues for public schools have had a rough time in certain areas of the State during the past few years. Particularly in the more settled, more highly developed areas (where junior college enrollments are highest), public support for school construction is lukewarm. The situation is such that the superintendent of schools in one large county, on hearing proposals that junior colleges take up the slack in rising enrollments said: "We can't do it. At least not without financial assistance from the State. If that isn't forthcoming, our junior college would have to shut its doors."

SINCE 1956 THERE HAS BEEN agreement that no state college or campus of the University will be located in an area that needs and does not have a junior college. This agreement recognizes the understandable but ill-considered preference of the people in local districts to transfer the responsibility and expense of their higher education away from home, by exerting pressure for establishment of state supported institutions. Since last Spring there has also been agreement that neither state colleges or University campuses will be planned for an area without joint approval of the Regents and the State Board of Education.

These two agreements, on the surface, would appear to guarantee adequate controls to avoid establishment of either duplicating institutions or isolated and

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poorly attended ones. But it hasn't worked out that way because neither agreement is binding. A legislator can earn considerable favor at home by establishing a state college for his constituents. At a recent session, bills were introduced at Sacramento that would result in the establishment of as many as 17 new state colleges—many without regard for existing agreements or real needs. Senator George Miller, of Contra Costa County, became so alarmed by the heavy financial commitment that his colleagues thus proposed that he urged every Senator and Assemblyman he could to propose a state college. When the total number rose to 26, the legislature realized that the situation had become ridiculous.

Even so, the legislature occasionally lets one slip by. Two of the most recently authorized state colleges, one in the North Bay Area and another in Stanislaus County, were of relatively low priority on the basis of projected enrollments.

Threats of real or imagined duplication of effort and facilities, together with the sure knowledge that the State's financial resources will be spread too thin if wasteful practices aren't avoided, have made California's higher education officials uneasy, to say the least. In the absence of desperately needed coordinating machinery that works, long smoldering disputes over higher education policy threatened to break out of the deliberation councils of Academe into a chaotic scramble for funds, facilities and public prestige.

BY EARLY 1959, conditions were ripe for things to start happening. Nothing had occurred to change the ever more formidable predictions of increasing enrollments. Though several new campuses had been authorized and new facilities constructed, not enough had been done to meet the challenge of the coming throngs of college students. Worse yet, the financial reserves California had built up during the war years had been exhausted and a new governor was forced to look for additional sources of tax revenue. For the first time in history, state college enrollments equalled those of the University on its seven campuses. In the 1959 session of the Legislature, no less than 23 bills and three resolutions, were introduced to establish new institutions, make changes in function of existing institutions or to change the present control and administration of higher education.

So complicated were the factors to be considered in the mass of pending legislation that Miss Dorothy Donohoe, assemblyman from Kern County, and chairman of the Assembly Education Committee introduced a Resolution which requested that the Liaison Committee of the State Board of Education and the Regents of the University of California "prepare a master plan for the development, expansion, and integration of the facilities, curriculum, and the standards of higher education in junior colleges, state colleges, the University of California and other institutions of higher education of the State, to meet the needs of the State during the next 10 years and thereafter. . . ."

THE REGENTS of the University of California and the State Board of Education met jointly in March and again in April, 1959 to discuss preservation of high educational standards, ways to avoid unnecessary duplication and expense for the taxpayers "by providing necessary facilities at the least expense to the State," and allowing all qualified young people of the State to obtain benefits of higher education. Governor Edmund G. Brown and several legislators attended the meetings and the press reported the Governor as warning that if the two Boards couldn't settle their pending problems his administration would.

Despite the anxious atmosphere of the meetings, several affirmations of principle were reached:

1. That colleges and campuses already approved by the Legislature would be placed into operation as soon as the fiscal condition of the State permits;

2. No new campuses or colleges, other than those already approved, would be established until adequate junior college facilities have been provided in the area.

3. No new campuses would be established without prior approval of both Boards. (The Legislature was urged to respect this agreement.)

4. That the principle of State assistance for capital outlay for junior colleges was endorsed.

The two Boards also passed a joint resolution "that the State Board of Education and the Regents of the University of California, in joint session, endorse and recommend to the Legislature the passage of [Miss Donohoe's] Assembly Concurrent Resolution 88. . . ."

The Legislature not only passed Resolution 88 but also commended the joint boards for the results of their meetings. The effect of the Legislature's action was to hold all legislation pending on higher education in abeyance until the requested "Master Plan" was completed.

California had been subject to intensive studies of its higher education before. But perhaps never had the studies carried with them the certainty of follow-through that this one did. Resolution 88 placed a deadline on the new study that coincided with the opening of the budget session of the Legislature in February, 1960. The Governor had already expressed his determination that solutions to higher education problems would be found and has included higher education in his call for special legislative consideration this Spring. Action of far-reaching consequences is sure to come. At stake are high standards and ample opportunities for higher education in the State.

The first decision of the Liaison Committee was to appoint a Master Plan Survey Team. It was composed of eight members, two each from the junior colleges,

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state colleges, the University and independent colleges and universities. (The University was represented by Dean E. McHenry, Professor of Political Science at the Los Angeles campus and Thomas C. Holy, Special Consultant in Higher Education.) For its chairman, they selected the shrewdly practical, excitingly vital president of Occidental College, Arthur G. Coons. To speed the Team's work, six technical committees were appointed to study enrollment projection, finances, costs, capacities and needs, adult education and selection and retention. By summer these committees were in full operation. On December 7, 1959, the Team was able to begin its formal presentation of conclusions at meetings of the Liaison Committee in Berkeley. By the end of Committee meetings on December 9, most of the report was in and approved. Still not presented, however, were the Team's recommendations on the touchy issues of differentiation of function and structure and coordination of higher education. These came at a meeting on December 17 and won quick approval from the Liaison Committee and, subsequently, approval in principle by both the full board of Regents and the State Board of Education.

The Master Plan Survey Team and the Liaison Committee had accomplished what some people in higher education thought impossible—a design for the future of California's colleges and universities acceptable to all concerned. The program showed evidence of hard won compromise. It also showed welcome evidence that leaders of California's public higher education are willing to give a little in their own ideas and aspirations, so that the young people of the State can be assured higher education of excellence within the State's ability to provide it.

The report that goes to the Legislature this month spells out the frightening truth of California's present higher education inadequacies compared to the job it is expected to do. It makes important recommendations on admissions policies. It carefully spells out considerations to be made in getting the most use out of existing facilities and in adding new ones. At the core of the proposals is a proposed constitutional amendment which:

1) defines the differentiation of functions of the three systems of higher education and the primary role of each, 2) removes the state colleges from the control of the State Board of Education and gives them a separate and strong Board of Trustees of their own, and 3) establishes new and more formal coordination machinery. It is a document of historic importance.

## YEAR OF DECISION-IV

# Master Plan for the Future

CONTROVERSY CAN MAKE any ideal seem tarnished and inadequate. But, if anything, the social values that made delegates to California's Constitutional Convention talk about education in 1849 are more, not less, valid in 1960. Recent debate and concern for higher education are in the nature of growing pains perfectly natural in a growing State. The Master Plan Survey authorized by the Legislature does not mean, therefore, that we have to tear down what we have built and start over. Instead, the job is to find ways to avoid or surmount the dangers of inefficiency, waste and inequity that loom near and present as California's colleges and universities face the enrollment crisis ahead.

The Heart of the Master Plan's Survey Team recommendations to the Regents and the State Board of Education is a proposed constitutional amendment. To be added to Article IX, the amendment would specify: "Public higher education shall consist of the junior colleges, the State Colleges System, and the University of California. Each shall strive for excellence in its sphere . . . "

The proposed amendment would then establish differentiation of functions and the source of control of each of the three types of institutions. The junior colleges would continue to be governed by local boards. The State Board of Education will establish minimum standards for their formation and operation and provide the same supervision as it does now over their general programs. The amendment would specify the following functions for the junior colleges:

1. Instruction up to and including the 14th grade including: Standard collegiate courses for transfer to higher institutions; vocational and technical education leading to employment, and general or liberal arts courses.
2. Granting of Associate in Arts or Associate in Science degree.

The suggested job description for the junior colleges is virtually identical to that suggested by previous

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studies of higher education in California, and generally now in force.

The proposed amendment designates the state college system as a public trust, to be administered by "The Trustees of the State College System of California." In numbers, term of appointment (16 years) and authority, the Trustees would be in a position similar to that of the Regents.

The state colleges also would have some new functions: Faculty research, "using facilities provided for and consistent with the primary function of the state college," is authorized and state colleges may award doctoral degrees jointly with the University of California. An additional change in descriptions of state college functions is reference to instruction in "professions and applied fields." In essence, this merely recognizes the status quo, however, and does not necessarily direct the state colleges into expanded programs in these fields. In other respects, the functions of the state colleges would be:

1. Instruction in the liberal arts and sciences and in professions and applied fields which require more than two years of collegiate education.
2. Teacher education, both for undergraduate and graduate students through the Master degree.

ADMINISTRATIVE CONTROL of the University remains unchanged in the proposed amendment. Its statement of function differs from current practice only to the extent that for the first time, the University's sole responsibility for certain functions is well defined. If the proposed amendment is approved, the University of California's functions would be:

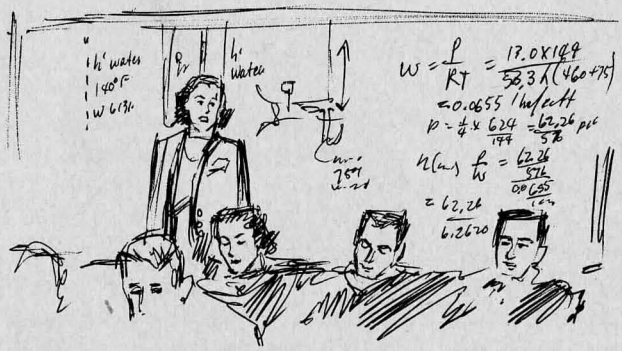
1. To provide instruction in the liberal arts and sciences, and in the professions, including teacher education.
2. To have exclusive jurisdiction over training for the professions (with specific—though not restrictive—mention of dentistry, law, medicine, veterinary medicine and graduate architecture).
3. To have sole authority in public higher education to award doctors degrees in all fields. It *may* agree with a state college to award joint doctors degrees in selected fields.
4. To be the primary State supported academic agency for research.

The permissive nature of the provision for joint state college-University degrees is significant because it, in effect, leaves with the University the protection of standards for doctoral degrees. There are three or four state colleges which conceivably, in the near future, if not now, could offer considerably expanded graduate programs. There does not exist, however, in the state college system, the same kind of quality control over the granting of doctoral degrees as exists in the University. If one state college offers them, presumably others may offer them whether they have faculties or facilities to do so or not. By way of contrast, the Los Angeles campus of the University was required to wait many years before the Regents agreed that it was ready to offer the doctorate. The University's campuses at Santa Barbara and Riverside have earned the privilege of granting master degrees very slowly. To all of the thousands who now hold University doctorates, to other distinguished centers of higher education throughout the world and to the public, the University has an obligation to protect the quality of the doctorate from dilution.

WHILE THE AUTHORITY for differentiation of functions under the proposed amendments would reside in the constitution, its interpretation would be the responsibility of a new Coordinating Council for Higher Education, also described in the proposed amendment. The Council would be composed of three members each from the four systems of higher education in the State. It would have a staff and a director, and would have the following functions:

1. Review budgets and capital outlay requests of the University and the state college system, and presentation of its comments on the general level of support sought to the Governor.
2. Interpretation of the functional differentiation among the publicly supported institutions—and advisory function to the Regents and Trustees of the state college system on programs appropriate to each.
3. Development of plans for the orderly growth of higher education and recommendations to the governing boards on needs and locations for new facilities and programs.

One virtue of the Council's organization is that it gives voice in the coordination of California higher education to all members, and effective votes to all segments on such matters as directly concern them. This, together with its independence from the systems themselves and its constitutionally defined function



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and advisory powers makes it a much stronger agency than any coordinating body established in the past.

THE LIAISON COMMITTEE'S recommendations on admissions constitute a bold stroke that affects at once the problem of huge enrollments, the future of the junior colleges and the efficiency of the State's investment in the young people attending the University and state colleges. The Committee agreed with conclusions of the Survey Team that entrance requirements at both the University and the state colleges needed firming up so that the most able students would have the greatest choice of institutions to attend. They recommend that beginning in 1962, the state colleges select freshmen students from the top one-third of the graduating class (as opposed to the present 45 per cent), and that the University select the top one-eighth (12 and one half per cent—as opposed to the present 15 per cent). It further recommended limiting freshman admissions through special procedures to 2 per cent of the annual freshman class, and that admissions for junior college transfers not eligible for admission to the state colleges and University as freshmen be tightened.

The effect of the admission recommendations will be somewhat more drastic on the state colleges than on the University. It is generally agreed that the reduction in percentages of high school graduates to be admitted to the University can probably be achieved through tightening or eliminating methods of admission other than the basic one (a B average in selected college preparatory courses). If this does not sufficiently reduce the percentage, it is conceivable that College Entrance Exams can be used to supplement present requirements. Contrary to frightening headlines that assured the public that the University of California would require an "A" average for admission (a prospect never even contemplated), it is felt by University officials that the recommended admissions requirements can be met with little appreciable immediate change in admissions procedure.

THE SURVEY TEAM also recommended that all students now admitted to the University and state colleges on "limited" status be required to meet regular admissions standards. This recommendation together with another that calls for a gradual reduction of lower division students at both the state colleges and universities (down to about 41 per cent of the total undergraduate enrollment by 1975), should have the effect of diverting 50,000 students to junior colleges by that year.

The Team put further pressure on local districts to expand or establish junior colleges by these recommendations:

1. That new state colleges and campuses established by action of the Legislature and the Regents in 1957 offer only upper division and graduate work until such time as junior colleges are provided for the areas these institutions serve.
2. That no new state colleges or University campuses be established in areas where adequate junior college facilities do not exist.
3. That encouragement be given to making junior college facilities available for school districts that don't have them, either by establishing new ones or by redistricting to include such areas in districts where junior colleges are now located.
4. That junior colleges be established in 22 specified school districts between 1960 and 1975.

Junior colleges now anticipate an enrollment of 250,000 by 1975 (a number larger than the enrollment of all California higher education today). Diversion of students from the state colleges and the University will add another 50,000 if the Liaison Committee's recommendations on admissions and reduction of lower divisions in other institutions are followed. The junior colleges obviously will be unable to accommodate this influx without assistance. Accordingly, the Survey Team recommends that the Legislature devise means of annually distributing construction funds to junior colleges. Recommendations also call for increasing the proportion of total current support paid to junior colleges from the State School Fund from the present 30 per cent to about 45 per cent. In order to distribute the burden of junior college support more evenly among California's citizens, it is further recommended that all areas of the State that are not now within junior college districts contribute to the support of junior college education on the basis of some yet to be devised but hopefully equitable formula.

ONE OF THE SPECIFIC CHARGES of Assembly Resolution 88 was that the Liaison Committee come up with priorities for the establishment of new institutions of higher learning. First state colleges on the Liaison Committee list are one in the vicinity of the Los Angeles International Airport with an estimated 1975 enrollment of 10,000 and another near Rialto (serving San Bernardino and

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Riverside Counties) with a 1975 enrollment of 8,000. The Committee urged that both be in operation by 1965. Both institutions, the Committee points out, should be planned for an ultimate enrollment of 20,000.

The Committee recommended that studies be made in 1965 and again in 1970 of needs for state colleges in five areas: Los Angeles-Orange County, (Griffith Park Glendale vicinity), Redwood City, Contra Costa County, Kern County and the South Coastal Area near Ventura.

With respect to the University, the Committee urged that the three new campuses approved by the Regents in 1957—San Diego, Southeast Los Angeles-Orange Counties and South Central Coastal Area, be completed without delay, and that "in any event construction to be started not later than 1962." The Committee specifies that both the Los Angeles and Berkeley campuses of the University should have maximum enrollments of 27,500 students. The estimated enrollment for Berkeley, in 1975 is 46,550. The 1975 projection for Los Angeles is 53,450. The Liaison Committee therefore recommends that the Coordinating Council that would be created by Constitutional amendment, study ways in which the enrollments beyond the recommended maximums can be accommodated. Among the specific suggestions offered by the Liaison Committee are diversion of students to nearby campuses of the University (both existing and authorized but not yet built), and the establishment of "satellite" campuses for special fields of study.

ONE WAY TO GET THE MOST out of State dollars for the support of higher education is, of course, to make sure existing facilities are used efficiently. The Survey Team, therefore, urged that more classes be scheduled in the late afternoon and evening hours and, when possible, on Saturday. Since the summer vacation months can leave classrooms idle, the Committee recommended that the State give financial support to the state colleges and the University for summer session programs in which students take courses that earn them credit toward degrees.

In matters of finance, the Survey Team and the Liaison Committee reaffirmed the principle that state colleges and the University shall be tuition free to all residents of the State. They define tuition as charges for direct teaching expense. Fees for health, counseling and other services are charged in both systems, however, and the Liaison Committee agreed that they should be high enough to cover true costs of all such items. Non-residents, the Committee says, should pay tuition in an amount that approximates as nearly as possible the average teaching expense per student at our institutions, as well as the "incidental fee."

The operation of such services as residence halls and parking lots, the Committee says, should be self-supporting (although some capital outlays for such facilities may be financed out of tax revenues).

Since the Committee felt that possible increases in incidental fees might be a hardship for some students who attend college with meager resources, it urged new provisions for student aid and loans.

One of the nagging questions associated with the coming large enrollments is whether or not there will be enough faculty people to teach them. The Liaison Committee made nine recommendations designed to improve the chances that there will be. Among them were suggestions for special loans and fellowships to assist graduate students, increased faculty salaries and expanded "fringe benefits" designed to "make college and university teaching attractive as compared with business and industry."

A MASTER PLAN is just a plan—a dream on paper. It must be implemented if it is to do its job. This Master Plan has won the endorsement of the leaders of all segments of California higher education. Clark Kerr, President of the University of California, says of it: "The plan was developed successfully, primarily because those who participated in it did not work simply as representatives of their own institutions, but kept firmly in mind the interests of the people of California. We owe them a debt of thanks."

Even more, perhaps, than thanks, the people of California owe the Master Plan support. Beginning this month, it will be under consideration by the Legislature. If it is, as President Glenn S. Dumke of San Francisco State College called it, a "delicate organism," it must be protected against the imbalances that might ensue from petty political ambition or purely local partisanship. Somewhat the same sentiment was expressed by President Coons following the final approval of the Master Plan by the Liaison Committee: "We have tried," he said, "to give the Legislature just what it asked for—we had to get unanimity. We got it. Let's hold on to it."

While logic, therefore, is all on the side of Legislative approval of the Master Plan and the ultimate submission of the proposed amendment to the people, the issues will be very much alive in coming weeks and months. Alumni of the University of California are urged to follow developments carefully. When in doubt, they should learn the truth about any issue before agreeing with any public pronouncement that fails to square away with the facts as they know them. The University of California has a tremendous stake in the decisions ahead. That stake is adequately protected by the Master Plan as proposed. California's pursuit of the ideal in a system of higher education that is characterized by efficiency, economy, quality and adherence to the democratic tradition deserves now, as never before, the wholehearted support of the University's more than 200,000 alumni. ▲

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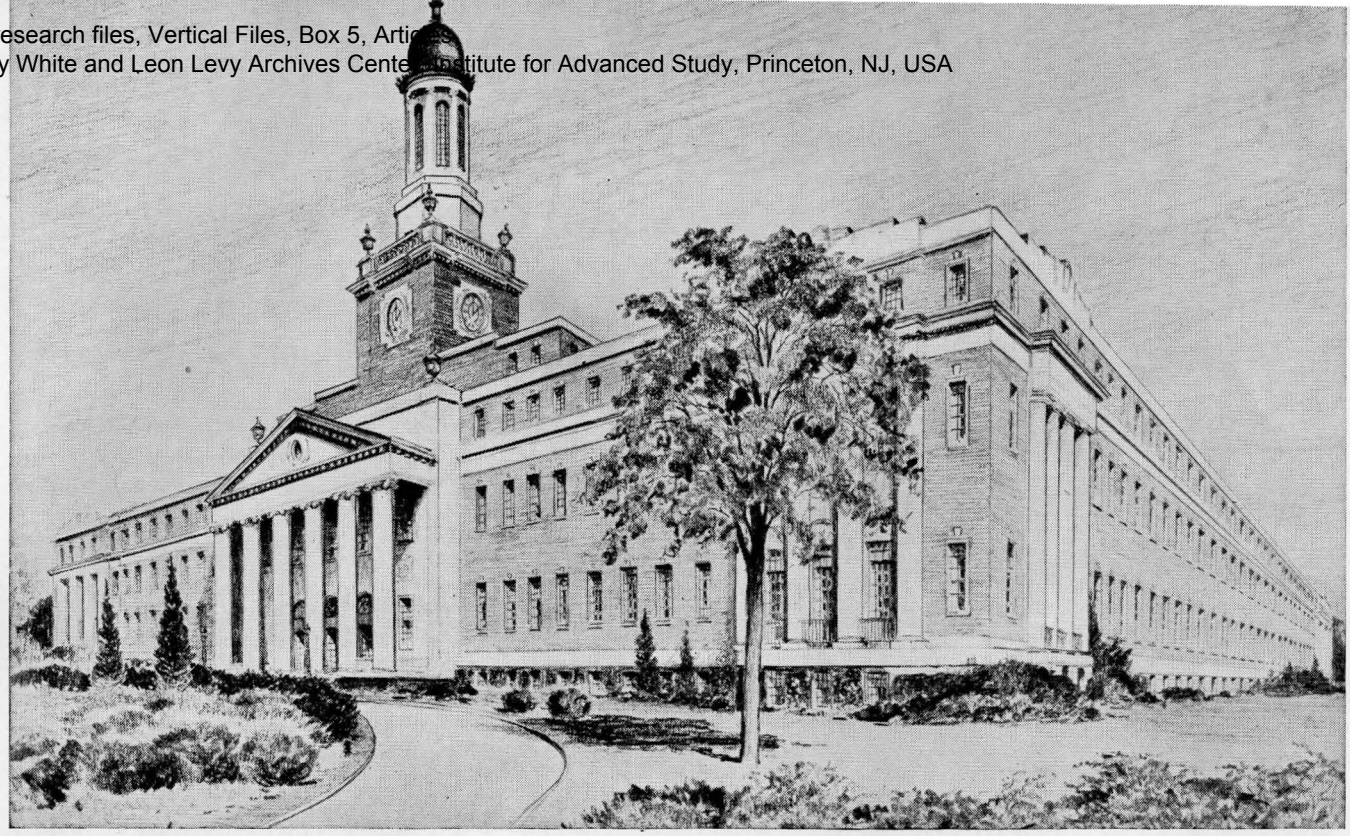

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*News about the University, its faculty, students and alumni*

# UNIVERSITY PANORAMA

**The President's Peregrinations:** President Clark Kerr spent the first three weeks of January on a "good neighbor" tour of South America, sponsored in part by the Council of Higher Education in the American Republics. Accompanied by Mrs. Kerr, he visited Caracas, Bogata, Quito, Lima, and Mexico City. The President returned to Berkeley January 20th with a heavy cold, and prepared to leave again on Febraury sixth. This second trip takes him to Rio de Janeiro, Sao Paulo, Montevideo, Buenos Aires, and Santiago.

Climaxing this series of visits will be a conference of Higher Education in the American Republics, to be held in Santiago, Chile the last week in February. Conference topics will include problems of educational planning, selection of students, governing of higher education in Latin America, etc. While in South America, Kerr is also meeting representatives of government, industry and education in connection with his research project on economic growth in underdeveloped areas.

**Mice Inherit Vice:** Berkeley campus psychologists have discovered that a preference for alcohol in mice may be inherited. Researchers made it possible for mice to choose between pure water and 20 proof alcohol mixed with water. Among eight strains of mice they found one in which the mice chose the alcohol mixture more than 75% of the time. Experimentation has made it possible to breed "lush" mice or teetotalers. The researchers stated emphatically that their findings do not imply anything about consumption of alcohol among humans. And in no case, it was claimed, did the mice actually get drunk, no matter how great their preference for alcohol.

**Few Students Cheat:** William Shepard, dean of students, claims the incidence of cheating on examinations at the University is very small and the number of students expelled for cheating even smaller. Some students, however, are refused readmission following a semester during which they have been found guilty of cheating. Just how the dean can be sure that all cheating that takes place is detected, punished and reported was not explained.

**ATTENTION NONMEMBERS OF THE ALUMNI ASSOCIATION**

In addition to the 49,000 Californians who regularly receive the CALIFORNIA MONTHLY as one of the benefits of membership in the California Alumni Association, there are some 115,000 nonmember alumni also receiving this issue. This particular issue is being sent to all alumni within the state in order to acquaint them intimately with the present problems and future responsibilities faced by higher education in California.

For information regarding subscription to the CALIFORNIA MONTHLY and other benefits of Association membership, write: Membership Director, Alumni House, University of California, Berkeley 4, Calif. Subscription to the magazine is $6.50 per year.

**Meteorite Reveals Age:** John Reynolds, associate professor of physics, has discovered that a meteorite that fell in Richardson, North Dakota, 41 years ago contains a vital clue to the mystery of the age of the solar system. Observations of rare Xenon gas, found dissolved in the meteorite, have lead Reynolds to conclude that the elements which make up our solar system finished evolving some 4,950 million years ago.

**Museum Given Footprint:** A natural cast from the print of a monstrous, 3-toed foot has been presented to the Museum of Paleontology by Edward Heller of San Francisco, a former Regent of

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HENCE THE formation in 1947 of The Friends of the Bancroft Library, Inc., to make possible the acquisition of special collections and rare items needed by the Library which otherwise could not be purchased. In the past two years, The Friends have presented to the Library documents relating to California's first governor, Don Gaspar de Portolá; the founding of San Diego, Monterey, and San Francisco; a letter signed by Sir Frances Drake; the Hawaiian papers of Sir John Bowring, and others.

THE INFLUENCE and interest of the group has also been responsible for gifts to the Library of diaries, journals, letters and records of historical and literary value. In addition, The Friends sponsor the publication of books (seven so far), print an occasional newsletter *Bancroftiana,* and meet each May to study the Library's needs.

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the University. The 22 by 18 inch indentation was evidently made by the largest variety of meat-eating dinosaur ever to tromp upon the earth: a Tyrannosaurus rex. The animal measured about 47 feet long, stood 19 feet high, and had six-inch teeth. He weighed about 8 tons and for supper he dined on other dinosaurs. The print, made about 100 million years ago, was discovered in a Utah coal mine.

**Mosquitos Multiplying:** Riverside entomologist M. S. Mulla explains that every year mosquitos develop a resistance to a few more of the common insecticides. The main reason they are multiplying, however, is that the amount of water used by expanding cities and highly concentrated agriculture is increasing. Mosquitos are raising families in the runoff from gardens in new suburbs, from newly irrigated deserts and farmers' ditches.

**Star-gazers Coming:** More than 1000 astronomers from every country in the world interested in this science will converge upon Berkeley next August at the invitation of President Kerr to attend the Eleventh General Assembly of the International Astronomical Union.

**Extension Ranks Fourth Best:** A New York University Survey ranked University Extension fourth in the nation in terms of services provided. University College, Syracuse was first, University College, University of Chicago second, and Evening College, University of Cincinnati third.

**Knowledge from Worms:** The nervous systems of earthworms, lobsters, octopi and rare electric fish are providing information that helps in the understanding of the more complex human nervous system. The giant nerve connections of the worm, a tiny brain in the lobster's heart, the bizarre electric field that surrounds some fish—all contribute to knowledge of the intricate physiology of the nervous system.

**Lifesaving Electronics:** A half-pound electronic pacemaker is providing the normal synchronized rhythm in the heart beat of a 37-year-old father in Walnut Creek after surgery performed at the Medical Center in San Francisco. The patient is the first person on the Pacific Coast and the fourth in the United States to have a permanent pacemaker electrode attached directly to the heart muscle. He entered the hospital with a progressively worsening heart block caused by the loss of synchronized function in the filling chambers and pumping chambers of the heart. During surgery,

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two thumbtacklike steel prongs projecting from a small block of plastic were installed. Plastic-coated wires, leading from the electrode points through the chest incision, were attached to the positive and negative poles of the pacemaker. The transistorized, battery-powered pacemaker delivers an electrical stimulus to the heart about 60 times a minute, maintaining a firm and regular pulse. The stimuli are imperceptible to the patient. He has returned to his family and his job.

**Faculty-Fellows:** Closer ties between students and faculty will be promoted at Berkeley through the appointment of 32 Faculty Fellows to serve at the University's eight new residence halls. The Fellows will dine at their halls frequently, will meet informally with students in the common rooms provided for this purpose, will arrange meetings with other faculty members and in other ways will attempt to stimulate the intellectual life of the halls. The Fellows are appointed for terms varying from one to three years.

## News from Davis

**Grass Discovery:** A species of grass new to science has been discovered in Solano county by Beecher Crampton, botanist in the agronomy department at Davis. Named *Orcuttia mucronata* by Crampton, the native grass is one of a peculiar group of annuals that grow in the dry, often barren, summer beds of large rain pools or basins.

The small stature of the plants and its rarity make it valueless as a forage plant, but it is undoubtedly the rarest native grass in California.

**New Kant Translation:** John T. Goldthwait, assistant professor of speech at Davis, has made a new translation of Immanuel Kant's "Observations on the Felling of the Beautiful and Sublime," to be published in the fall by the UC Press. The work will be available for the first time in English since a 1798 translation, now very rare.

This short work of the 18th-century philosopher was one of his two writings in the fields of aesthetics and was extremely popular, helping to establish Kant's reputation.

**Former Teacher Honored:** The name of Professor Charles M. (Pop) Titus, one of the great friends of Aggie students of past years, was adopted by the Regents in December as the permanent name for Residence Hall No. 3 at Davis. The new hall, housing 200 women stu-

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dents, was completed just before registration last fall.

Titus, a mathematician and teacher of surveying, came to Davis in 1910 as an instructor in the old University Farm School. From 1925 until his death in 1937 he was an assistant professor of mathematics and surveying and associate statistician in the Agricultural Experiment Station. To students, however, Titus was known widely as "Pop." A bachelor, he lived for many years in North Hall, where he served as an unofficial counselor as well as friend of the student residents.

**Foundation Formed:** The Cal Aggie Alumni Association has set up a California Aggie Alumni Foundation to promote and contribute to the educational and research activities of the University. The new organization also plans to develop a substantial scholarship program and further the educational purposes of the University, particularly through the activities of the Alumni Association.

Jerry W. Fielder '39 of Dixon is president of the board of directors. John P. Underhill '41 of Stockton, president of the Cal Aggie Alumni Association, is vice-president. Herbert Barker '26 of Oakdale is treasurer, and William B. Hewitt '33, professor of plant pathology at Davis, is secretary.

Other board members besides Fielder and Underhill are J. Earl Coke '22 (Berkeley) of San Francisco, Waldo M. Weeth '30 of Coalinga, and Erwin M. Plocher DVM '52 of Watsonville.

The Foundation can accept gifts, endowments and property to carry out its operations, said Fielder. All members of the Cal Aggie Alumni Association are eligible for membership in the foundation.

## CALIFORNIANS IN THE NEWS

**Charles R. Wilke,** chairman of the department of chemical engineering, has been elected director of the American Institute of Chemical Engineers.

**Allen C. Blaisdell,** director of International House at Berkeley since it was founded, is the University's first "Foreign Service Officer." The appointment was made by Chancellor Glenn T. Seaborg in November.

**Edward Teller,** director of the Radiation Laboratory at Livermore has received the first General William J. Don-

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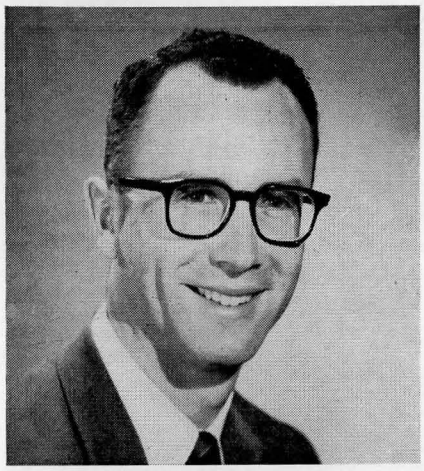
ovan Memorial Award for contributions to the country as a political refugee. Teller is a native of Hungary.

**Emilio Segre,** professor of Physics and recent Nobel Prize winner has been named Faculty Research Lecturer for 1959-1960.

For pioneer work in outlining present and future areas of petroleum production, engineering and research, **Lester C. Uren,** professor of petroleum engineering has received the Mineral Industry Education Award. The award is presented by the American Institute of Mining, Metallurgical and Petroleum Engineers.



David P. Gardner

**David P. Gardner** has been appointed field director of the California Alumni Association to replace Clifford L. Dochterman, who recently became Assistant to University President Clark Kerr. Dave will have the responsibility of managing the Association's alumni club activities and will also direct a scholarship program which has assisted more than 3000 students through their first year at the University. A former Berkeley High School student body president, Dave has attended both the University of California (for an M.A. in political science) and Brigham Young University where he did his undergraduate work. He comes to the Association by way of the Berkeley City Manager's Office and the California Farm Bureau Federation.

**A. Starker Leopold,** professor of zoology, has been elected president of the California Academy of Sciences. The new Vice-President of the Academy is J. Wyatte Durham, professor of paleontology.

Latest additions to the faculty roster of honorary degree recipients are **Hermann O. L. Fischer,** professor of biochemistry, emeritus, Berkeley and Dr.

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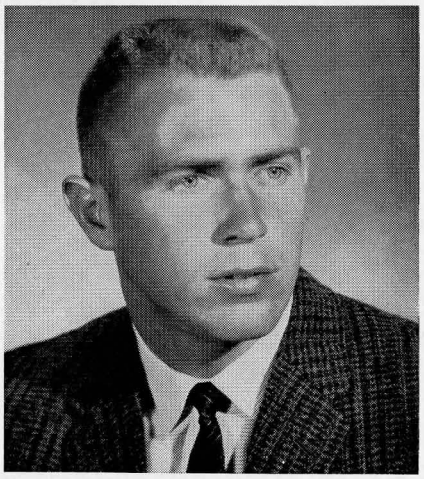
**Willard Fleming,** Dean of the School of Dentistry, San Francisco. Fischer's degree was awarded by the Justus Liebig University in Giessen, Germany. Dr. Fleming's degree was from the University of Toronto.

Four members of the faculty at Berkeley have been named Fellows of the New York Academy of Science. They are **Chancellor Glenn T. Seaborg; Paul L. Kirk,** professor of criminalistics; **Samuel Lepkovsky,** professor of poultry husbandry; and **Daniel Mazia,** professor of zoology. The honor is conferred on a limited number of the Academy's members for outstanding work in the advancement of science.



Mike K. White

**Mike K. White** who this past fall served as freshman football coach under Pete Elliott and compiled a 4-1 record has been appointed the first resident manager of the Alumni Association's brand-new Tahoe Alumni Center near Tahoe City and Squaw Valley. The alumni center, which will open to members of the Association this July, will offer accommodations for 150 persons both summer and winter. Mike is a Business Administration graduate of the class of '58. While on campus he won letters in football, basketball, rugby and track. He has previously served the association as Athletic Director and Assistant Director at the Lair of the Bear at Pinecrest.

**Dr. Donald A. Glaser,** visiting professor of physics at the University, has been awarded the $2,500 American Physical Society Prize sponsored by the Hughes Aircraft Co. The presentation was made in honor of the physicist's invention of the bubble chamber: one of the most important instruments used in the detection and study of nuclear particles. Dr. Glaser built the first, tiny one-inch bubble chamber some six years ago at the University of Michigan. ◄

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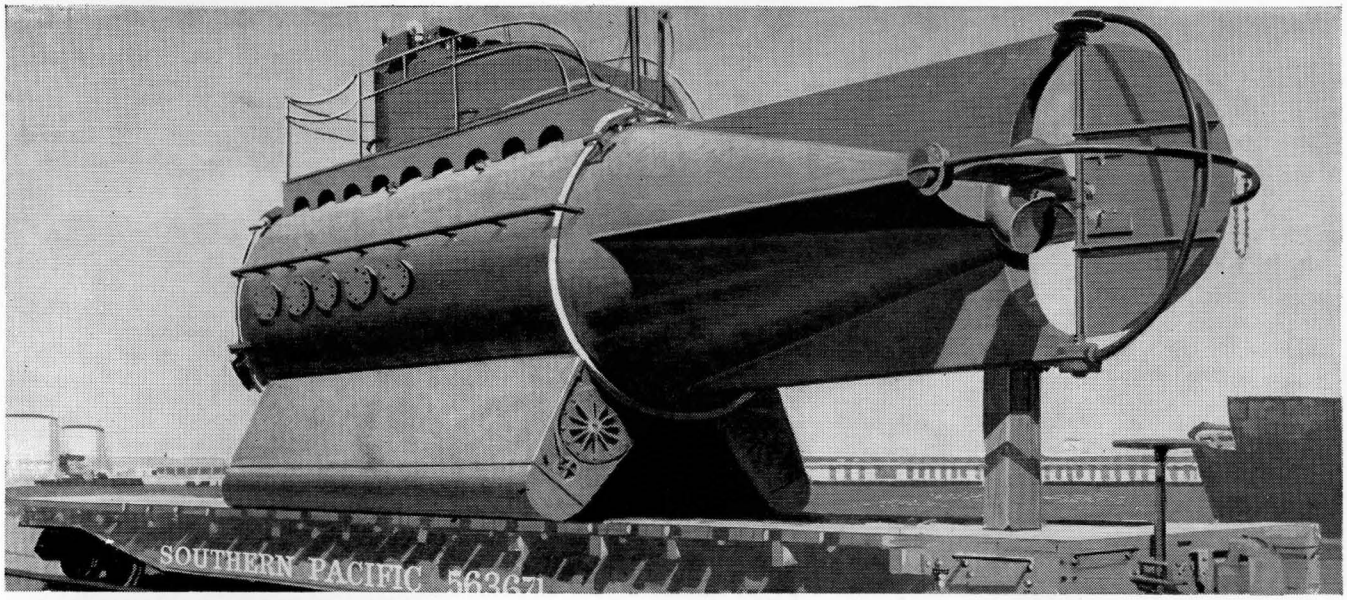


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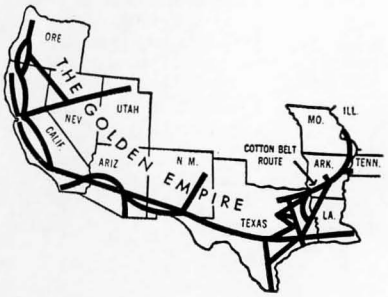


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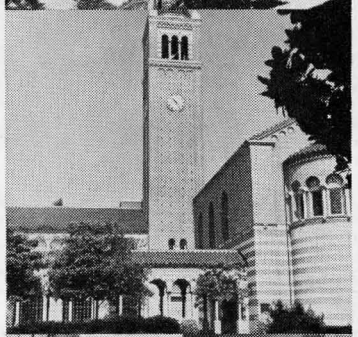

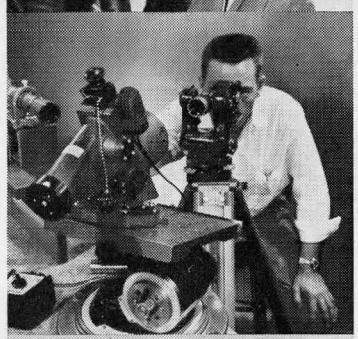

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# Belgrade Impressed by Kennan, But Calls Him a Tough Envoy

## Unyielding on U. S. Policy, He Refuses to Overlook Hostile Yugoslav Acts

By PAUL UNDERWOOD
Special to The New York Times.

BELGRADE, Yugoslavia, Jan. 3—Last spring, when President Kennedy's appointment of George F. Kennan as United States Ambassador to Yugoslavia was announced, a prominent Belgrade journalist grinned and said: "A big man."

The reaction was typical. The Yugoslavs to a man were delighted. Mr. Kennan's reputation as a diplomat, intellectual and world-recognized student of international affairs was well known to them and the appointment flattered their egos.

The Yugoslav Communists interpreted the selection as a sign that Washington finally was realizing the importance of Belgrade in the world picture.

Yesterday, another Yugoslav also referred to Mr. Kennan as "a big man," but this time there were no happy grins.

Belgrade has found the new Ambassador a difficult man from its point of view, touchy on questions of American interests and unwilling to overlook without protest the generally unfriendly presentation of United States policy in the controlled Yugoslav press.

### Envoy Has 3 Jobs

A United States Ambassador today has in reality three jobs, not necessarily complementary.

The first is his traditional diplomatic role as the representative of one chief of state to another.

In most capital cities, he also is the chief administrative officer of a large staff with problems undreamed of by people at home.

When he has a moment free from these two time-consuming functions, he must devote himself to what many Americans have come to regard as the most important aspect of his work—presenting a picture of the United States to the people of the country to which he is assigned.

On the basis of what he has said and done since his arrival in Belgrade, it is clear that Mr. Kennan feels the greatest service he can render is to make plain beyond the slightest doubt the framework of United States policy, the force that motivates it and the strength that lies behind it.

George F. Kennan

### He Faces Uphill Task

As a profound student of Communist ideology and practice he is aware this is an uphill task; that Yugoslav leaders, however much they quarrel with Moscow, are still Communists, basically opposed to many of the ideas the United States stands for. As Communists, they consider the United States and the rest of the capitalist world a decadent society, steadily losing power and influence.

To Mr. Kennan, this is all the more reason for his self-assigned task. He can at least hope to prevent any Yugoslav miscalculations on the aims of the United States or its determination to defend its vital interests.

The low-point in his relations with the Tito regime was reached in the weeks immediately after last September's conference of nonaligned nations in Belgrade. The Yugoslavs held him personally responsible for the widespread criticism in the United States press of President Tito's outspoken support of Soviet policy.

In recent weeks, relations between the embassy and the Yugoslav regime have improved, particularly since Washington's decision in November to permit Belgrade to buy more wheat. A drought last year cut the Yugoslav harvest severely.

There has been a series of friendly gestures toward Mr. Kennan on the part of Marshal Tito and other Yugoslav leaders, part of a concerted effort by Belgrade to mend some neglected diplomatic fences.

Despite his ups and downs with the Yugoslavs, Mr. Kennan is generally recognized as the outstanding personality in Belgrade's diplomatic corps. Whom he talks with and how long the conversation lasts and its apparent temper all are watched carefully.

# BUDAPEST REGIME SMILES AT SATIRE

## Reds, Easing Solemn Mien, Allow Jokes on Problems

BUDAPEST, Hungary, Jan. 4 (AP) — The Communist regime of Hungary is letting its shortcomings be lampooned sharply in public and is even joining in the laughter.

The main topic of conversation among Budapest citizens yesterday was a four-and-a-half-hour television revue, seen by an estimated total of 2,000,000 people, that relentlessly satirized some of the major failings of Hungarian life.

The revue was televised live from a Budapest theatre. The cameras frequently turned on Government leaders in the front row; they appeared to be enjoying every barbed shaft.

Some Western observers considered it possible that a new soft breeze was blowing in Hungary in the wake of the anti-Stalinist drive launched at the twenty-second Soviet party congress in Moscow last fall.

In a gibe at shoddy building methods, a plumber in one sketch said:

"I read recently that the regime intends to build 1,000,000 new apartments. Which means that I, for one, will never be out of repair work."

Making light of a theory of the Communists that they will eradicate middle-class thinking, the plumber quips:

"When I call on a bourgeois housewife I say 'Good morning' and never forget to add 'madame.' She likes it.

"When I call on a proletarian housewife, I also say 'Good morning, madame.' She likes it even more."

Another sketch showed a radio reporter interviewing a worker on a collective farm:

REPORTER—What is your daily schedule?

PEASANT—I read the papers and magazines, read old and new books, listen to the radio, watch television and play gramaphone records.

REPORTER — Where does work figure in your daily schedule?

PEASANT—Work? What is that? They tell us it is all done with machinery now.

REPORTER — But what about the small private plot of land you are permitted to own on this collective?

PEASANT—That is different. My family is out there now working itself to death.

In a third sketch, a professor asked a student what type of commentaries the Voice of America gave on current affairs. The student emitted a loud screech, indicating the effectiveness of the Hungarian regime's radio jamming apparatus.

### Journal Joins Satire

The latest issue of the usually solemn literary journal Elet es Irodalom (Life and Literature) took a similar satirical approach.

Regarded by many Hungarians as reflecting neither life nor literature, the journal is often referred to simply as "es."

The editors this week reproduced "es" in the title block in big bold letters. To drive home the point, a block circle was drawn around the word.

In an editorial, printed upside down, the journal acidly commented on the regime's constant exhortations that writers should go to factories and then write about "Socialist man."

"Let our writers go out into life," the journal said. "Knee-deep in its wilderness they should be able to report reliably on what they see there. We, too, should like to know."

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# SOVIET EDUCATORS HAIL NEW METHOD

## Say Teaching System Ends 5% Rate of Failures

By THEODORE SHABAD

Special to The New York Times.

MOSCOW, Sept. 21—A high Soviet education official said today that the school system continued to be plagued by the problem of "repeaters," children who are kept two years in the same grade.

Mikhail P. Kashin, Deputy Minister of Education of the Russian Republic, said that last year 5 per cent of all school children in the republic, the largest of the 15 in the Soviet Union, failed to advance to the next grade because of poor achievement.

He said the authorities were studying various solutions for the repeater problem, but he firmly ruled out the Western practice of dividing children into "fast" and "slow" classes with different programs for each group.

"We think every normal child must be able to succeed in the basic educational program in our schools," the official said at a news conference.

### New Method Cited

Stressing that the Soviet Union was trying to solve the problem by "improving the quality of the teaching process," Mr. Kashin reported that Lipetsk oblast (province), in central European Russia south of Moscow, had been able virtually to eliminate repeaters by introducing teaching methods that aroused the pupils' interest and induced them to take a more active part in the learning process.

Usually in Soviet schools one pupil answers questions in front of the class for ten or fifteen minutes while the others sit with nothing to do. Under the Lipetsk method, the teacher organizes the class in such a way as to keep the children occupied to the maximum extent possible.

The publicity given to the Lipetsk method, Mr. Kashin added, has produced a "pilgrimage" of teachers from all over the Russian Republic to watch their Lipetsk colleagues in action.

In one case the number of visitors was said to have been so great that a class had to be adjourned to the school's auditorium to accommodate them.

Primary and secondary education in the Soviet Union is under the jurisdiction of the republics. Revisions in the teaching organization in the Russian Republic generally set the tone for similar changes in the other republics.

Overcrowding of schools may be one factor in the high percentage of repeaters. Many schools are still working on two shifts because the construction of new buildings has been unable to keep up with the number of children reaching school age. Mr. Kashin said that the annual influx of schoolchildren in his republic was 1,500,000, compared with a yearly increase of 800,000 in school capacity.

He predicted an improvement in the late nineteen sixties, when the children of the generation of young parents born during World War II reached school age. The birth rate dropped sharply in the war years and is expected to be reflected in a reduction in the size of the next generation.

In reply to a question, Mr. Kashin said the Soviet authorities planned no change in the present emphasis on arts and crafts in the lower grades and on industrial shopwork in the upper classes. There have been many complaints, some from eminent mathematicians and physicists, that compulsory shopwork was a waste of time for children talented in the sciences.

"Our ideal is not a mathematical robot," Mr. Kashin said, "but a well-rounded person schooled both in the humanities and in the sciences and able to do manual labor."

Soviet pupils spend about 10 per cent of their classtime in "labor subjects" in the lower grades, 20 per cent in the middle grades and about a third in the higher grades that correspond to United States high schools.

As a result, both boys and girls from the ages of 15 to 17 spend 12 of their 36 hours of classtime a week in industrial shopwork.

### Rate Lower in New York

In New York, 4.5 per cent of the pupils in the junior high schools and 3.8 per cent of those in the elementary schools were retained in grade in June, 1961, the most recent date for which complete figures were available.

In general, the New York school system follows a policy of "continuous promotion," but a pupil may be left back once in the elementary division and once in the junior high division.

School systems in the United States have moved in recent years toward the grouping of pupils by ability. Many educators favor a flexible grouping based on ability in each subject rather than a grouping based on intelligence scores or some similar single standard.

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8/26/62



# J. C. CORBETT GETS WORLD FUND POST

## Appointed U. S. Director in 75-Nation Monetary Unit

Special to The New York Times.

HYANNIS PORT, Mass., Aug. 25—President Kennedy selected Jack C. Corbett today to be the United States director of the International Monetary Fund.

The fund is a pool of gold and currencies, provided by seventy-five nations, on which any member may draw should it run into difficulties in its balance of international payments.

Mr. Corbett, who is now connected with a bank in Rome, Italy, will succeed Frank Southard Jr., the United States executive director since 1949. This week Mr. Southard was named the deputy managing director of the fund, an international position.

Mr. Corbett was graduated from the University of Munich in Germany before World War II and received a Master's degree in business administration from Georgetown University in Washington, D. C., in 1939.

After two years in the research department of the Federal Reserve Bank of New York, he became an assistant economic adviser to the State Department. He later served with the War Shipping Administration, the International Bank for Reconstruction and Development and the United States Economic Cooperation Administration. He was a lieutenant in the Navy from 1944 to 1946.

In 1950 Mr. Corbett was appointed deputy director of the Office of Finance and Development Policy of the State Department and served as director of that office from 1952 to 1957.

The International Monetary Fund has a governor and an alternate for each of the member nations, but most of the decisions are taken by the eighteen-member board of executive directors. Thirteen of these are elected, and five, including the United States member, are appointed by their governments to serve on a more or less permanent basis.

The managing director of the fund is Per Jacobbson, who will retire in February, 1964. It is assumed his successor will be a European, since an American is expected to succeed Eugene R. Black next May as president of the World Bank.

# *Wilson School Faculty Adds New Professor*

**Dr. W. Arthur Lewis**

Special to The New York Times.

PRINCETON, N. J., Aug. 25—Princeton University announced today the appointment of Dr. W. Arthur Lewis, vice chancellor of the University of the West Indies since 1959, as Professor of Public and International Affairs.

Dr. Lewis' appointment is the fifth in the last year in an expansion of the faculty of Princeton's Woodrow Wilson School of Public and International Affairs under an anonymous gift of $35,000,000 received a year ago this month. Dr. Lewis is an authority on economic growth and political and social change in emerging countries.

Before going to the University of the West Indies, he was deputy managing director of the United Nations Special Fund. He has also been a consultant to the Governments of Gold Coast and Western Nigeria and has served as an economic adviser to the Prime Minister of Ghana.

From 1948 to 1958 Dr. Lewis was Stanley Jevons Professor of Political Economy at the University of Manchester, England. He has received honorary degrees from Columbia and the University of Toronto.

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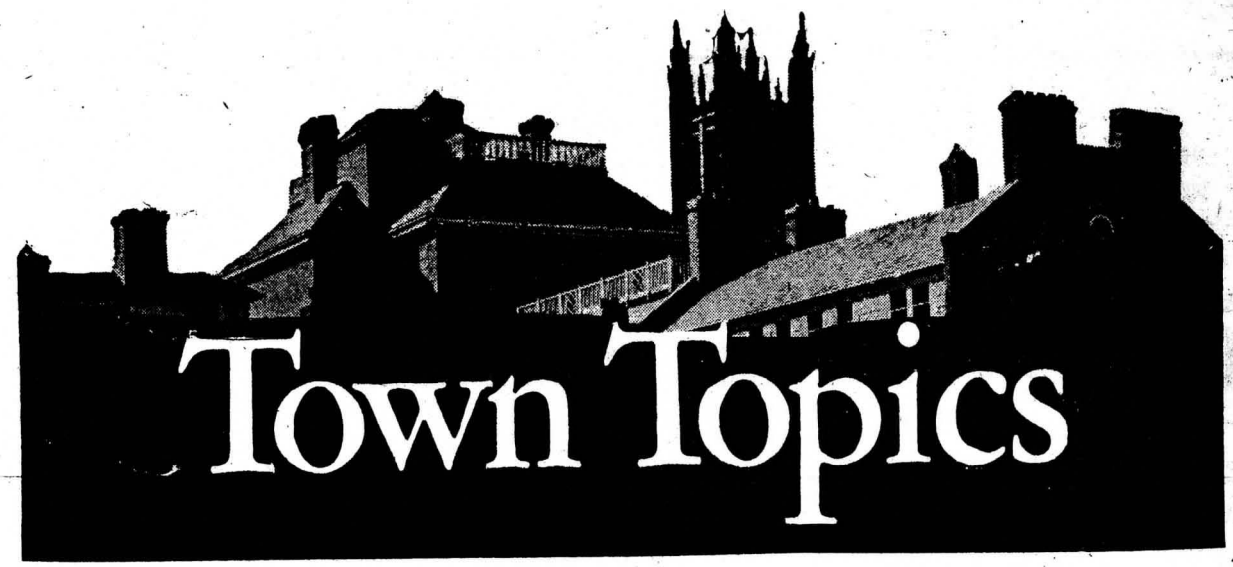


## WE NOMINATE

Marver Hillel Bernstein, able specialist in public and educational administration and teacher-writer of the front rank, who as the first Associate Director of Princeton's Woodrow Wilson School of Public and International Affairs is playing a major role in charting fresh approaches to high-level education for public responsibility. To the 42-year old Bernstein and School Director Gardner Patterson jointly belongs the distinction of hammering through the conception of "Princeton Fellows in Public Affairs," the newly announced program which next September will enable nine Federal officials in mid-career to enter upon individually tailored programs of study.

While there is nothing startlingly novel in the idea of having public officials, businessmen and industrialists, bankers and even journalists "return" to college campuses for advanced training, the designation of the initial "Princeton Fellows"—following an exhaustive screening process—is but a single step in the development of professional education for the public service at a level of excellence comparable to the nation's outstanding schools of medicine and law. It is an integral part of the expansion of the Wilson School's post-graduate program made posible by last summer's dramatic announcement of the creation of Foundation "X" with anonymous grants totaling $35,000,000.

The interests, achievements and potential of the first crop of "Princeton Fellows" are suggestive of the capacities of this 43-year old native of Mankato, Minn., a Princetonian since 1946, chairman of the University's Department of Politics and in 1960-61 Ford Foundation Research Professor in Government. This past March, with Bernstein's elevation to his pivotal post, Patterson emphasized Bernstein's involvement in the Wilson School's graduate program since its inception in 1948, his experience on all levels of government, his professional interests, and his deep concern for the education of young men and women on the threshold of policy-making responsibilities in public affairs.

A consultant over the years to a number of Federal agencies, including the U.S. Bureau of the Budget and the Economic Stabilization Agency, and widely publicized for his contributions a decade ago to the Connecticut Commission on State Government Organizations, Bernstein is the kind of scholar whose knowledge and executive abilities are frequently tapped by government. He was, for instance, the lone non-lawyer singled out in 1960 as a member of the Organizing Committee for a permanent President's Conference on Administrative Procedure and twice in the 1950's was called to Israel as adviser on government administration to the Office of the State Controller.

Bernstein, among whose publications are numbered "The Job of the Federal Executive," "The Politics of Israel" and "American Democracy in Theory and Practice," the last a leading college text in American Government, helped make headlines in 1960 as Associate Staff Director of a "task force" sponsored by the Association of the Bar of the City of New York and concerned with "Federal Conflict of Interest Laws." This Special Committee called for a "thorough-going reconstruction of existing laws"—a program achieving a balance between the country's need for protection against conflicts of interest and its crying need for high-talent personnel.

For sensing the vast differences separating education for the profession of government from training in detailed management techniques; for helping launch such bold educational ventures as the Princeton Seminar in Washington which will meet periodically in Washington to consider important, continuing problems of public policy; he is TOWN TOPICS' nominee as

**PRINCETON'S MAN OF THE WEEK**

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THE NEW YORK TIMES, TUESDAY, JULY 24, 1962

# Tax-Free Foundations Charged With Evasion of Revenue Laws

## Patman Declares House Study Shows Exemptions Should be Suspended Until Statutes Are Tightened

By MARJORIE HUNTER

Special to The New York Times.

WASHINGTON, July 23 — Representative Wright Patman urged today that tax exemptions to foundations be suspended until Congress had tightened the laws.

In a House speech, the Texas Democrat charged many foundations and charitable trust were engaging in money lending, stock transactions and proxy fights for contol of corporations.

"There is every indication that many tax-exempt, charitable foundations are being used for purposes not related to charity," he said.

Representative Patman also charged that some tax-exempt foundations were used to avoid Federal estate taxes, thus preventing huge fortunes from being channeled into the economy for public use.

"The late Secretary of the Treasury [Andrew] Mellon used a charitable foundation to avoid estate taxes on a multimillion-dollar estate," he said.

### Ford Foundation Cited

He also declared that the Ford Foundation was used to reduce the taxable estates of Henry and Edsel Ford. Estate money was placed in the foundation to avoid sales of Ford Motor Company stock in order to meet large estate taxes, he said.

Representative Patman is chairman of the House Small Business Committee, which studies 522 of the estimated total of 45,124 tax-exempt foundations and charitable trusts.

He said that during the period covered by the study—1951 through 1960—the 522 foundations and trusts had tax-exempt income of more than $7,000,000,000.

"Since the money lost to the public's treasury must be found somewhere," he asserted, "the burden is shifted to people who are obliged to work for a living—to the widow with a cottage instead of a palace, to business men, and to the farmer."

A breakdown of the money received from 1951 to 1960 by the foundations under study follows:

| | |
|---|---|
| Gross sales or receipts from business | $58,318,422 |
| Gross profits from business activities | 19,406,469 |
| Interest received | 477,425,135 |
| Dividends received | 2,161,246,458 |
| Rents and royalties received | 241,268,958 |
| Gain from sale of assets | 1,448,529,763 |
| Other income | 215,353,922 |
| Gross income, excluding contributions | 4,563,230,705 |
| Contributions, gifts, grants | 2,451,837,219 |
| Total receipts including contributions | 7,015,067,924 |

Representative Patman said the study had shown laxness and irresponsibility by the Internal Revenue Service. He said many foundations had violated Treasury regulations.

He called on the Secretary of the Treasury to declare "an immediate moratorium" on granting tax exemptions to foundations and charitable trusts until Congress can clean up "this mess."

Representative Patman suggested that "many foundations have become a vehicle for trading in securities and dodging the capital gains tax." This, he said, "poses some big questions in the light of the recent sharp breaks in the market."

"In my view, tax-exempt fundations—all of whom are supported by the taxpayers—should not be permited to use public funds for speculation in the stock market. Their mistakes or misfortunes are too likely to have a disastrous effect on millions of our citizens," he declared.

He said the committee had found that 106 foundations owned at least 10 per cent of at least one class of stock in one or more of 252 corporations on Dec. 31, 1960.

Mr. Patman contended that business enterprises controlled by foundations were a threat to small business men.

Foundations, he said, have readily available cash. He asserted that the Sears-Roebuck Foundation made a short-term loan of $1,200,000 at 3 per cent interest to Sears-Roebuck and Company in 1954.

"Foundation control of business puts tax-paying business men—particularly small business men—at the mercy of giants with tax umbrellas," he said. "A foundation-controlled business, with no stockholders to worry about, could conceivably operate at a loss for some time in order to eliminate a competitor."

Representative Patman outlined in detail what he termed the "struggle" to obtain information from some of the foundations. He said the committee finally had to issue subpoenas to seventeen foundations that had failed to furnish information voluntarily.

"The attitudes of far too many of the foundations under study suggested an unmatched arrogance and contempt for the Congress and the people whom we represent," he said.

The information in the study was obtained by questionnaires and follow-up letters. No committee hearings were held.

### Foundations Decline Comment

A spokesman for the Ford Foundation said yesterday that it had answered the questionnaire mailed by Mr. Patman's committee, but that it had not received a copy of the committee's finding.

"Until we have that," he added, "we are not in a position to comment."

Dr. Emerson Andrews, director of the Foundation Library Center, an independent information center, challenged Mr. Patman's estimate of the number of foundations and charitable trust funds with tax exemptions. Mr. Patman had given that number as 45,124.

Dr. Andrews said there were about 15,000 tax-exempt foundations at the close of 1961. He said that Mr. Patman had included many civic groups and charitable organizations in his estimate.

These organizations, like the foundations, are required to file Form 990-A in their annual reports to the Internal Revenue Service, Dr. Andrews pointed out.

As to Mr. Patman's charges, Dr. Andrews said it would be unfair to comment until he had read them in full.

Spokesmen for several other foundations, when apprised of Mr. Patman's statements, reserved comment or refused to comment because they thought the charges did not apply to them.

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THE NEW YORK TIMES, FRIDAY, JUNE 15, 1962.

# Hofstadter, Nobel Winner, Tells C.C.N.Y. Graduates of Research Threat to Universities

By MILTON BRACKER

Publicly supported institutions of higher education must be "constantly vigilant" to remain independent, a Nobel Prize physicist declared in the commencement address at City College last night.

One "shadow," said Prof. Robert Hofstadter of Stanford University, is the growth of research organizations within the university but supported by outside arrangements. There is danger, he asserted, of control by these organizations of the central functions of the institution.

Professor Hofstadter was a member of the City College class of '35. He won the Nobel Science Award in 1961 for shedding new light on the shape and size of the atomic nucleus and its main components.

In referring to research organizations, he said:

"These institutes concentrate in various branches of knowledge and are supported on a generous scale, compared to the rest of the university, by outside contracts of one form or another. This is a national matter, and a recent one, and does not refer to your university alone or to mine.

"We must be careful to see that the growth of these large semi-independent research organizations within the university does not result in control by these organizations—or even partial control—of the administrative and academic functions of the university—even for what may seem at the time to be well-motivated reasons.

"These research organizations have narrow purposes compared to the main function of the university which is to teach, to allow its staff to study and to encourage the thinking process. Though bigness is of the essence of the research organizations, the thoughts they produce fall into various small corners of the universities' range of knowledge and interest."

Citing the role of the individual creative thinker in an era of "big" science, Professor Hofstadter acknowledged that some of the new basic discoveries could not be made without massive apparatus. Government support of such projects is "right and desirable," he said.

"The only point I would like to make," he added, "is that respect for the individual must be maintained, even though he has to be surrounded by massive devices and large administrative organizations. We can see how difficult it will be to find a solution to this problem."

Although he has had a "fair amount" of experience in the new "wondrous" world of big machines, the speaker said, "I feel that I belong also to the older world—the world of the small, man-size laboratory, where the physicist obtained results in his own little laboratory with table-top apparatus."

He added: "The free spirit in a free university is a much bigger and more important force than the results of any one particular research program."

Research opportunities for the individual must not be hampered by "making him justify himself before committees," Professor Hofstadter went on.

"Almost any research organization operating under control of national or even local committees will, in my opinion, produce mediocre results," he said. "We need the bright spark of the individual who is thinking freely and imaginatively to bring us the remarkable insights of the future."

The 116th commencement exercises of the college were held in Lewisohn Stadium. Professor Hofstadter recevied an honorary LL. D. degree. It was only the eleventh honorary degree to be bestowed in the history of the institution. The physicist also received a medal, designed by Prof. Albert d.Andrea, chairman of the Art Department at the college, and struck in the recipient's honor.

Undergraduate and graduate degrees were conferred upon 3,308 students. The class was the largest in ten years. Dr. Buell Gallagher, president of the college, presided.

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# COLLEGES STEP UP FACULTY RAIDING

Continued From Page 1, Col. 3

no more than one course of teaching a year. Often that teaching assignment is even cut in half—one course every other semester. The president said that in the past month he had to intercede in more than half a dozen cases to try to block the raid.

Observers call most serious the fact that many of the outstanding faculty members devote less and less time to the teaching of undergraduates.

They also point out that weaker institutions, intent on improving their image rapidly, are trying to buy prestige by using a few prominent scholars as window dressing while the rest of the faculty continues to be underpaid. This threatens to widen the gap between the academic stars and the supporting cast.

Another widespread complaint is that institutions with sizable foundation or Government grants are able to lure outstanding talent away from rivals that have slowly and laboriously built up departments of quality but lack glamorous crash projects.

### Raiding Morality Defended

On the credit side, it is widely conceded that the long-term effects will be to give outstanding scholars the kind of prestige and reward they have long been denied. This can be expected to upgrade the more routine conditions, too.

Dr. William J. Baumol, Professor of Economics at Princeton and chairman of the committee on salaries of the American Association of University Professors, said that he saw nothing immoral in hiring exceptional faculty members at higher salares so long as the institution's general quality and strength was built up at the same time.

What is wrong, he said, is the establishment of one spectacular chair as bait, surrounded by low salaries.

Although there has been criticism of excessive research and consultant work, Dr. Baumol said that the fact was that these services were desperately needed, with not enough people capable of providing them.

"I often say 'no' and then feel guilty; but I also feel guilty when I sit on the train to Washington going away from the campus," he said.

He said that raiding had been intensified as a result of higher specialization.

"Sometimes it's easier for me to talk to colleagues in other departments than to some of the specialists in my own," he said.

### Money Is Chief Lure

What are some of the factors that make faculty members eager to move? A spokesman at the University of Chicago said that "money is it." But he conceded that there were other important lures.

"We can't compete with the scenic beauty of Palo Alto in California," he said. "And let's face it, too, that the determining factor in the decision is the wife and the family."

Urban universities, unless they can become deeply involved in neighborhood development and urban renewal, face increasing handicaps. "The urban university, if it wants to keep open at night, has to have good faculty housing and schools for the children nearby," the Chicago spokesman said.

Dr. Putnam F. Jones, dean of the Graduate Faculty at the University of Pittsburgh, said that a "university in upper New York State" had tried to get one of his economists by offering, in addition to a $6,000 raise, a university-paid insurance, retirement and annuity, plus full four-year tuition payment for all of the scholar's children at the colleges of their choice.

Pittsburgh had earlier abducted the same professor from Chicago.

Another talking point is to let an outstanding scholar point out other scholars, anywhere in the country, with whom he would like to build a particularly strong department—and promise to try to get them as a tie-in. Pittsburgh said that it had lost some anthropologists when the Indiana University started bidding hard for them to make up such a constellation.

A check with Indiana showed that they were able to get three anthropologists last week, among them a leading African and Latin-American specialist from Pittsburgh and another from Northwestern University. Both had associate professors, but were immediately moved into full professorships.

Indiana's move toward an outstanding department was supported in part by a $2,300,000 Ford Foundation grant for graduate international studies.

Getting a man who wants to specialize in a newer field of strong interest to him is a powerful lure. Indiana took an economist from the graduate business school at the University of Nebraska, without a special financial carrot.

"He is interested in transportation and public utilities, and we are building an Institute of Urban Development, with economists and business school experts cooperating," a spokesman said.

"But we're also losing them," he admitted. Rutgers University in New Jersey had just taken a professor of the classics by offering him a department chairmanship.

Few institutions like to talk about their losses, whereas they advertise their acquisitions. The fear is that faculty departures signify lower prestige. However, although university administrators like to boast about new appointments, they are understandably reluctant to talk about the terms lest they make the next foray more costly or lower the morale of the home forces.

One administration member at Yale, who called the present recruiting "strictly a dog-eat-dog business," pointed with pride to the acquisition last year of Prof. C. Vann Woodward, the historian. Professor Woodward had been at The Johns Hopkins University and was offered a Sterling Professorship at Yale where his son is an undergraduate. He was given a one-year leave of absence by Yale as his first year there. Thereafter, his teaching schedule was to consist of one seminar so that he would be free to devote himself to writing.

### Teacher Wins Promotion

By contrast, Yale last year lost Dr. E. G. Begle, nationally noted director of the School Mathematics Study Group concerned with high school mathematics reform. Only an assistant professor at Yale, where the mathematicians appeared more concerned with university mathematics than lower school curriculum revision, Dr. Begle accepted a full professorship at Stanford's Graduate School of Education.

Dr. Kingman Brewster, provost at Yale, said:

"You've got to enjoy fishing without catching all the fishes."

He said that the high-quality institutions in the East were doing relatively little effective raiding of each others faculties because their salary scales and general conditions were not sufficiently different. As a consequence, he said, "natural inertia keeps people from moving."

These institutions, he noted, merely try to replace faculty members they lose, often through retirement, or to "fill in weak spots."

He said that, except for the metropolitan areas, the Eastern universities gain from the fact that there was "no bumper-to-bumber commuting problem" and that these institutions, although comprehensive in academic scope, were still communities of scholars and not sprawling giants.

### Other Factors in Decision

He listed these attractions that, in the process of raiding, are often more important than increased salaries:

¶Liberal university-financed housing loans.

¶Generous research support in terms of money and time.

¶A fellowship policy to attract first-rate graduate students.

¶The assurance that the lower echelons of the faculty are also well-paid and generously treated.

However, he said that the decision between accepting or turning down offers from comparable institutions was most likely to be influenced by climate, smog, the conditions of the local public schools and the distance to the suburbs.

"New York City, for example, is either a major attraction or a deterrent," he said. "You either like it a lot or it's repulsive."

Whereas Eastern spokesmen talk of the attraction of their institutions, a Stanford representative pointed to "the westward tilt of the continent." He cited the example of the chairman of Anthropology Department at Columbia University going West to take a professorship at Stanford. Similarly, the chairman-elect at New York University, will be a professor on the California campus next year. Three senior faculty members from the Columbia Law School and one from Cornell were also listed as following the westward tilt.

### Threat From the West

Stanford and the University of California are probably among the most effective—and respected—large-scale threats to the Eastern "repositories of talent," as one academic expert in New York put it. Stanford's special attraction, in addition to its considerable wealth and ideal climate, is its almost unlimited expanse of land. Much of this is available at token rentals for professors who want to build their own homes.

Perhaps even more important, part of this land has been converted into a giant "research park" for private industrial laboratories. This makes the consultants' territory just about as convenient and compact as the adjoining campus itself.

A Stanford spokesman said that the box score for 1961-62 was not yet available, but that in 1960-61 the university had gained thirty professors and lost only one.

Dr. Robert J. Wert, vice provost, said that he considered as important as all the tangible lures the fact that Stanford was developing its programs and departments "across the board." The really good person, he said, cannot be attracted by a flashy offer unless the whole department "looks good."

### Spend Less Time at Job

Jacques Barzun, dean of the Graduate Faculties at Columbia University, said that faculty-pirating practices failed to add to teaching manpower but merely transplanted it. In the process, the transplanted teachers tend to teach less each time.

He told of an approach by "a wealthy Western university" to one exceptionally good professor. The offer was $2,000 more than whatever his salary might be—plus $1,000 for every semester hour of teaching he chose to do. An average undergraduate one-term course consists of three semester hours.

Dr. Barzun called this "official recognition of absurdity"—payment on a piece-work basis to reward the teacher for doing what ought to be his basic job.

He listed these among other current practices:

¶"The-band-of-brothers idea," or the growing practice among faculty members to say: "If Joe goes, I go, too." This, he stressed, is not a matter of personal friendships but a result of team work on foundation projects or other research grants.

¶Snaring a noted academician with the promise that once he has established a new department and got it going, he would not have to do anything by way of administration or teaching. "This is a form of sterilization," Dr. Barzun said.

¶Stockpiling, or the practice of building up larger staffs of prominent faculty members than necessary, either for purposes of prestige or to bag grants or contracts later on. He said that this practice was confined largely to the Western institutions.

### Competition Is Evaluated

Charles H. Peake, Vice President for the Academic Disciplines at the University of Pittsburgh, charged that some of the "excessive competition" was coming from "upstart institutions" that wanted to build prestige by establishing "professional landmarks outside their general range." He said that the safety brake to slow this trend was that "good scholars fortunately do not want to go to places where they can't find good graduate students."

The more serious competition, Dr. Peake said, comes from institutions with a real potential for rapid but solid expansion. In face of competition from grant-supported programs, universities can only hold their own by developing their own research institutes so that they "can offer package deals." He pointed to the loss of an African specialist who will only have to teach one course in his new station.

"In many places, the trend is to get three people instead of one to take care of both research and teaching," he said. He said that "the code of ethics of when you can recruit is gone."

### Small Colleges Hard Hit

The raiding parties also hit the smaller colleges of high quality. Wesleyan University in Middletown, Conn., reports that after one of their professors of classics had written a successful book, he was bombarded with offers.

The president of one large state universcity told him to come and write his own ticket. He offered the professor his own department, if he did not like the existing one, a Wesleyan spokesman said. The scholar turned down the offer as "preposterous."

However, this was only a respite for Wesleyan. The University of Rochester managed to be sufficiently persuasive.

Dr. Joseph C. Palamountain Jr., Wesleyan's provost, said that the competition had moved from mathematics and the sciences to the social sciences. It is rapidly growing in the creative arts, but has not yet seriously affected the humanities, he asserted.

Dr. Palamountain pointed to a successful recruiting venture in getting an economist who had been with the Bureau of the Budget and a visiting professor at Stanford.

"We don't go very far in the direction of lighter teaching loads because we are a teaching institution," he said. "We try to match salaries with other offers. Fortunately there are some people who like New England."

"We lose if somebody needs a big hunk of physical equipment or wants a large team of specialists," he said. "But we are attractive to teachers who want to work alone or across the many disciplines."

Dr. Palamountain said that once a man whom the department wanted was spotted "the attempt at seduction has to take takes more than two months, it usually ends in failure.

As the competition in the academic field gets stiffer, some institutions are successfully raiding the two institutions that originally took some of their most valuable members away from the campus—Government and industry. Yale, for example, last month announced that William R. Bennett Jr. would leave Bell Telephone Laboratories to become an associate professor of physics and applied science to help develop the new undergraduate engineering department.

Chicago has raided the National Science Foundation and come away with John T. Wilson, who will become assistant to the president and Professor of Psychology. It also carried off Donald McClure from the Radio Corporation of America and has appointed him Professor of Chemistry.

For other recent appointments, Chicago has gone to the Union of South Africa, British Columbia, Canada and Venezuela. The University of Pittsburgh confirmed the greater recruiting effort abroad.

Historians at Chicago point out that what may seem momentarily alarming is not a new phenomenon in American academic history. They recall that the only reason the university was able to start operations in 1892 was because its president William Rainey Harper, was a pastmaster at raiding faculties across the country.

# Newark Business Aide Nominated

Special to The New York Times.

NEWARK, June 9—Mayor-elect Hugh J. Addonizio today announced the nomination of Paul Busse, executive secretary of the Newark Economic Development Committee, as business administrator in the city's new administration.

Mr. Busse's appointment, the first made by Mr. Addonizio since his election on May 8, must be approved by the City Council.

Only two of the nine members of the council were elected at the same time. A run-off election for the others will be held Tuesday. The new administration will take over on July 1.

Mr. Busse, who has been executive secretary of the committee since 1956, is also assistant director of the Greater Newark Development Council.

Before coming to Newark in 1956, Mr. Busse was general executive secretary of the New York Board of Trade. He lives in Shrewsbury with his wife and three children.

Paul Busse

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permit the debate.

Asserting that the university's stand conflicts with the First and Fourteenth Amendments of the United States Constitution, covering freedom of spech and assembly, Mr. Wirin said:

"This rigid, unbending policy violates the constitutional provisions not so much because the prohibition impinges upon the right of the speaker to speak, although it undoubtedly does, but because it impinges on the even more important right of the student to hear—the very base and reason for being of the free speech guarantee in the first place."

**Quotes University's Head**

In citing various exponents of free inquiry, Mr. Wirin quoted the widely publicized statement of last year by Dr. Clark Kerr, university president, which said:

"Members of the university community, faculty members and students alike, deserve the same right to freedom of thought and expression which every citizen enjoys outside the campus boundaries. The university is not engaged in making ideas safe for students. It is engaged in making students safe for ideas."

Counsel for the university, headed by Thomas J. Cunningham, contended that the students had no ground for suit because the "free speech" right involved was that of the "off campus" Communists.

**Defends Regulations**

Their access to the campus could be regulated, like that of anyone else, it was argued, because the university premises were the property of a statutory corporation "with full powers of organization and government."

The university's regulatory powers, it was stated, were upheld unanimously by the United States Supreme Court in a case in 1934 that involved a requirement that certain students take a military science course although they had religious scruples against war.

There is no ban, it was noted, on speeches on the campus by students who are Communists.

In support of the contention that limitations on outside Communists were "reasonable," the university lawyers observed that Communists had been held to be disqualified to teach at the university.

The lawyers also said that both state and Federal laws had held the Communist party to be an arm of an international conspiracy or a revolutionary movement threatening the security of the United States.

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# Teller Is Mute on Oppenheimer; Gets TV Show to Delete Question

NYT 4/16/62

By JOHN C. DEVLIN

A question about Dr. J. Robert Oppenheimer caused the deletion yesterday of a one-minute-and-four-second period of the taped WNBC-TV show "Open Mind." The deletion was made at the request of Dr. Edward Teller, the nuclear scientist, who was the guest.

Dr. Oppenheimer, also a nuclear scientist, was forced out of Government service as a security risk. During the deleted portion Dr. Teller had been asked whether he believed Dr. Oppenheimer should now be granted clearance and permitted to serve the Government. Dr. Teller refused to answer.

The incident occurred two weeks ago when the show was taped. At the end of the one-hour program yesterday at P. M., the announcement was ade that a deletion had been de. However, no details were n.

When the moderator, Eric F. Goldman, Professor of History at Princeton University, was reached at his home in Princeton, N. J., for an explanation, he said the episode had occurred about midway in the program. Professor Goldman said he had brought up the subject of Dr. Oppenheimer and had said:

"I'd like to ask you this: "In view of the high respect in which Dr. Oppenheimer is held in many American scientific circles today, and his very high reputation in a number of circles abroad, both as a scientist and as a humanist, are you still opposed to granting him clearance and letting him serve the Government of the United States?"

Professor Goldman said Dr. Teller did not answer, remain-

Continued on Page 41, Column 6

1962.

# TELLER IS SILENT ON OPPENHEIMER

Continued From Page 1, Col. 2

ing silent for thirteen seconds. At the end of that time, the professor said, he asked Dr. Teller: "I take it you do not want to discuss this matter?"

He said Dr. Teller again did not comment, and the program resumed.

Attempts to reach Dr. Teller at his home in Berkeley, Calif., were not successful yesterday.

Dr. Oppenheimer had drawn the opposition of Dr. Teller when his right to serve the Government was being challenged before a special personnel security board of the Atomic Energy Commission in 1954.

Dr. Teller said then he believed Dr. Oppenheimer was loyal but "confused and complicated" on issues on which they disagreed. Dr. Teller said he would feel more secure if public matters would rest in other hands.

From 1947 to 1952 Dr. Oppenheimer headed the Atomic Energy Commission's general advisory committee of top scientists.

The security board, by a 4-to-1 vote, held he had "fundamental defects" in character and associated beyond "tolerable limits" with Communists.

Dr. Oppenheimer is now director of the Institute for Advanced Study at Princeton.

Other portions of yesterday's broadcast contained a warning by Dr. Teller that the Soviet Union's developments in nuclear weapons over the last three years may have tipped the scales of the cold war in the Soviet's favor. He said the United States had weakened its position by not testing and that it was unlikely an agreement on a ban of nuclear-weapons testing could be reached.

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THE NEW YORK TI

# SEX OF A PELICAN BAFFLES BRITONS

## Government to Wait and See About Birds in London Park

Special to The New York Times.

LONDON, May 15 — The Government said today that after ten years it was still unable to tell male pelicans from female pelicans in St. James Park.

A decade ago a Conservative member of Parliament asked whether some newly arrived varieties of the long-billed bird were males or females, or both.

"I am advised," a Government spokesman replied then, "that the birds are still too young to reveal their sex."

Today, in reply to the same question, Lord John Hope, Minister of Works, cleared his throat and said a "post-mortem examination showed that Wilfred, one of two North American white pelicans who recently had to be destroyed following an accident, was appropriately named."

When the laughter in the House of Commons subsided, he was asked whether there would be "a happy event" in view of the fact that the survivor of this pair was now sharing a rock with an Eastern white.

The Minister replied that it was "difficult to say yet, but as the rock warms up during the summer we may be able to say."

Finally, F. G. Bowles, a Labor member, suggested that the Minister stick a needle into a cork and suspend it over the bird. If the cork swings in a line, the theory goes, the bird is a male, if in a circle, a female.

The Minister replied he was aware that this test "worked for ladies, but I do not know if it works for pelicans." He added: "I will look into it."

Robert Cushman Murphy, retired Lamont Curator of Birds at the Museum of Natural History, said yesterday that it was possible to tell male from female pelicans by watching their behavior in courtship.

"You will find," he said, "that the male is the pursuer, as he is supposed to be among human beings."

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# Critic at Large

## Library Display Recalls Some of the Furor Dickens Caused Here in the 1840's

By BROOKS ATKINSON

TO mark the 150th anniversary of the birth of Charles Dickens, the Morgan Library is displaying a few of its Dickens treasures. In addition to the manuscripts of "Our Mutual Friend" and "A Christmas Carol," they include a first edition of "American Notes, For General Circulation" and the twenty monthly installments of "Martin Chuzzlewit."

It is difficult now to realize the intensity of the rage these last two books raised. Although Dickens was only 30 years of age when he came here in 1842, he was already a celebrity of sensational proportions. For about two weeks he enjoyed the excited Americans who mobbed him and gave him dinners, receptions and hysterical adulation.

But the more he saw of America the more he detested it. "I don't like the country," he wrote to John Forster in London. "I would not live here for any consideration." Again: "I dislike the very name of Washington [the city, not the man]. I am repelled by the mere thought of approaching it." Finally: "I do fear that the heaviest blow ever dealt at liberty will be dealt by this country."

Twenty-five years later, when he made a second visit, he and the Americans got on famously—all past wrangling having been forgotten. But in 1842 and 1843 Americans were, in Dickens' words, "stark, staring, raving mad" when they discovered the depth of his animosity in "American Notes" and "Martin Chuzzlewit."

●

No doubt Americans were more thin-skinned then than they are now, which is to say very thin-skinned indeed. Mrs. Trollope, smarting from two years of store-keeping in Cincinnati, had expressed her contempt for America in 1832 in "Domestic Manners of the Americans," which she found appalling. In 1836 Harriet Martineau published "Society in America," which was critical though not caustic. Being deaf, poor woman, and lacking the senses of taste and smell, she may have missed some of the abominations that distressed Mrs. Trollope and Dickens.

The best of the early travelers was Alexis de Tocqueville, the French jurist, who, with a companion, made a tireless journey of inquiry in 1831. Out of favor with the Government of France, he came to America to escape neglect at home. His dispassionate analysis of the American character and government, "Concerning Democracy in America," will never be outdated. It still has an uncanny grasp on the truth.

But Dickens was temperamental. Perhaps he was also a little provincial. He first began to dislike America heartily when Americans objected to his public criticism of the pirating of his books by American publishers. Since foreign writers were not protected by copyright laws, he had received nothing for the copies of his books that had made him a hero here. He felt that he had been robbed.

Granted the validity of his grievance and the crudities of American life — particularly the incessant spitting—it is difficult to avoid an impression that he was also vindictive; and the curt American scenes interpolated into "Martin Chuzzlewit" are the evidence.

●

Sales of the first monthly numbers of that novel were disappointing to an author accustomed to prodigious success. To arouse interest in his new work he dispatched his hero to America in the fifth number at a time when the controversy stirred up by his "American Notes" was hottest.

But his natural exuberance is not in the American scenes. In comparison with the characterizations of Pecksniff, the grandiloquent hypocrite, and Sairey Gamp, the monumental imposter, the American pages are flat. They are also extraneous in a novel that is not notable for good construction. And his vilification of the American eagle as a composite bat, bantam, magpie, peacock and ostrich seems gratuitously insulting, despite the passage of 119 years. No wonder America was outraged.

Although Dickens despised Americans as a lot, he had a keen eye for individuals. He described John Quincy Adams at the age of 76 as a "fine old fellow." Daniel Webster did not fool him. "The only thoroughly unreal man I have seen on this side of the ocean," Dickens shrewdly remarked. More and more Americans agreed with him as Webster's career progressed.

Since Dickens was a comic writer on a grand scale with an instinctive understanding of people, America forgave him by the time he returned for his second visit in 1867. He took home a net profit of $100,000 for his readings. In the stately calm of the Morgan Library it is amusing in 1962 to find a few relics of the 1842 scandal. No teapot ever had a fiercer tempest.

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# SCHOOL PROPOSED TO AID PHYSICIANS

## Study Group Offers Plan to Keep Them Up-to-Date

Special to The New York Times.

CHICAGO, May 26—A university without walls, a campus or a resident faculty and student body has been suggested by a joint committee.

It would provide broad postgraduate education for doctors, especially in new developments that come so fast the average doctor has difficulty in keeping up to date.

The group making the proposal is the Joint Study Committee in Continuing Medical Education. It worked nine months on the report, announced this week at the headquarters of the American Medical Association here. The A. M. A. was instrumental in organizing the committee.

The proposed national organization "should have the function and independence of a university, but need not have the physical plant, resident faculty and resident student body which a university ordinarily has," the committee said.

Details of organization, financing and staff are already being worked out. The proposal will be submitted to the A. M. A.'s trustees and to the other organizations that sponsored the joint study, the names of which follow:

The Association of American Medical Colleges, the American Academy of General Practice, the American Academy of Pediatrics, the American College of Obstetricians and Gynecologists, the American College of Physicians, the American Hospital Association and the American Psychiatric Association.

Dr. Bernard V. Dryer, study director and a member of the faculty of the Western Reserve University School of Medicine, Cleveland, Ohio, wrote the report. It said that "because of the tremendous expansion in medical knowledge, modern physicians are confronted by an almost impossible task in attempting to keep themselves abreast of new developments."

The proposed national organization would develop comprehensive "core curriculums" for each field of medicine. They would include taped lectures and demonstrations to be telecast nationally, and other teaching materials — books, films, slides and the like—for correlative use on the local level.

"National presentations of the organized, sequential curriculum would be focused regionally and locally by medical centers, community hospitals, and general or specific medical societies, which would make use of direct bedside teaching, group clinics, group discussions, question and answer session, clinical pathological conferences, seminars and other modalities for patient-centered, active physician participation," the report said.

A series of voluntary examinations would allow the participating physician to assess his own progress. The physician would not be required to take them.

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THE NEW YORK TIMES, SUNDAY, MAY 27, 196

# PRINCETON SCHOOL TO GET NEW HOME

## Old Building to Be Moved for Public Affairs Center

Special to The New York Times.

PRINCETON, N. J., May 26 — Princeton University announced plans today for a new building to house its Woodrow Wilson School of Public and International Affairs.

The plans call for moving the school's present headquarters 250 feet to the northeast and erecting the new building on the site of the old, at the corner of Washington Road and Prospect Avenue. The school will continue to use the old building at its new site.

The surrounding exterior facade of the new building, designed by Minoru Yamasaki, will include seventy columns, each twenty-seven feet high. The ceiling of the first floor will be twenty-nine feet six inches high.

Construction will be financed with funds from a foundation established by anonymous donors who gave $35,000,000 to the school last August. The cost of the building has not been determined.

### Site Plans Under Study

Site plans were submitted to the Borough's Zoning Board of Adjustment Thursday. They must be acted upon by the Planning Board within thirty days.

Dr. Robert F. Goheen, Princeton's president, said the decision to move the present building, erected in 1952, had been based on a desire "to keep the expanded school close to the heartland of the academic community."

The new and relocated buildings of the school will be connected by an underground passageway.

The relocation of the old headquarters will require the demolition of a frame structure now occupied by the Department of Astronomy. The department will be moved to new headquarters in Eno Hall. Two other buildings, a service garage and a house, also will be removed.

On the north side of the new building, facing Frick Chemical Laboratory, a patio area will include a shallow pool running the 210-foot length of the building. Entrances from both Prospect Avenue and Washington Road will be provided.

### Library on First Floor

The first floor will include a 250-seat auditorium and a library. Study carrels will be suspended from the ceiling on three sides of the library, leaving the floor free of structural columns.

The second floor will include faculty offices. Below ground, each of four conference rooms will seat sixty persons. A central corridor will have clearance from the main floor to the roof.

Dr. Goheen called Mr. Yamasaki's design "a fit embodiment and expression of the high aspirations we hold for the enlarged Woodrow Wilson School of Public and International Affairs, and especially its developing new programs of post-graduate professional education."

The university is expanding the school's curriculum and faculty to provide professional training for graduate students in public affairs and for Federal officials who wish to add to their professional competence by further study.

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# DR. OPPENHEIMER IN ROYAL SOCIETY

## British Elect Atom Scientist —Lipmann Also Chosen

Special to The New York Times.

LONDON, May 5 — Dr. J. Robert Oppenheimer, the nuclear physicist who helped develop the atomic bomb, has been elected a fellow of Britain's Royal Society.

The society, one of the oldest and most distinguished scientific organizations in the world, cited Dr. Oppenheimer for his "contributions to the modern quantum theory." The election took place last Thursday.

The society also elected Dr. Fritz Albert Lipmann, a member of the Rockefeller Institute for Medical Research. He was cited for "contributions to biochemistry, especially for enzymology and cell metabolism."

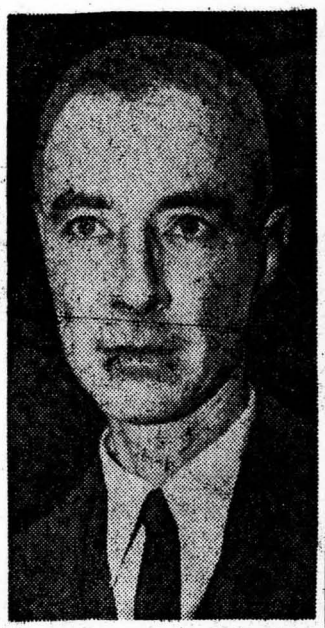
Twenty-five British and Commonwealth members and four foreign scientists are elected each year.

### Background Not Cited

Sir William Hodge of Cambridge University, a member of the society's governing council, said that Dr. Oppenheimer's controversial background was never discussed by the nominating committee.

"Appointment is entirely on scientific grounds," he said.

In 1954 a personnel security board of the Atomic Energy Commission denied security clearance to Dr. Oppenheimer. He was barred from access to atomic secrets because of "fundamental character defects," and association beyond "tolerable limits" with Communists.



Associated Press

**JOINS ROYAL SOCIETY: Dr. J. Robert Oppenheimer.**

The board, however, did not impugn his loyalty.

Now 57 years old, Dr. Oppenheimer is director of the Institute for Advanced Study at Princeton, N. J., a post he held through the bitter inquiry eight years ago.

His recent invitation to a White House dinner for Nobel Prize winners raised speculation that his security clearance may be restored.

Besides the two Americans, the Royal Society elected as foreign members Daniel Bovet, chief of the Laboratory of Therapeutic Chemistry of the Instituto Superiore di Sanita in Rome, and Dr. Vladamir Prelog, head of the School of Chemistry in the Swiss Federal Institute of Technology in Zurich.

Dr. Bovet, a Nobel Prize winner, was cited for work in therapeutic chemistry and pharmacology. Dr. Prelog was elected for work in modern stereo chemistry, or "study of the shape of molecules."

There are about 600 British and Commonwealth members of the society and sixty-one foreign members. Election is for life.

The Royal Society was founded 302 years ago to "advance natural knowledge." But it has included such nonscientific members as Samuel Pepys, the diarist, and the poets John Dryden and Lord Byron.

Pepys was so popular that he was named president. He once wrote that he fully endorsed Newton's theories on gravity without understanding a word of them.

The society coordinates British scientific bodies, advises government departments and sponsors scientific expeditions. A recent expedition went to the island of Tristan da Cunha to determine whether a volcano had ceased erupting. It had.

Although it has been said that some Britons would rather get an F. R. S. (Fellow of the Royal Society) than be knighted, the organization has also been criticized for inactivity.

One critic said:

"It's like a royal court. It there, but that's all that it is.

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# Hard-Headed Physicist

## Henry DeWolf Smyth

THAT the phrase "atomic energy" became a household word so quickly at the close of World War II is much to the credit of Henry DeWolf Smyth. He is a scientist who has two doctorates in physics and a talent for clear, hard-headed appraisal of events and their future impact.

**Man in the News**

Today he heads a committee that is reappraising United States policy toward the International Atomic Energy Agency.

The agency was formed in the hope of making the atom as potent a force for peace and progress as it certainly is for war. The reappraisal requires a hard-headed look at the agency's chances for fulfiling that original hope.

Professor Smyth, who is United States representative on the agency, heads the committee partly because he believed that atomic energy's huge potential for good required that such a reappraisal be made.

Similarly, he was chosen to write the famous "Smyth report" of World War II partly because of his strong belief that citizens of the United States and the world must know the facts of atomic energy and the bomb to be able to make wise decisions concerning this revolutionary new force.

Directly or indirectly most American got their first glimpse of the atomic age through that report.

**Worked Under Secrecy**

Dr. Smyth (the name is pronounced not as smith but with an "eye") is a physicist, educator and administrator of the first rank.

He is lanky and gray haired. He is also a lover of the outdoors, particularly of mountains, which he likes to explore on foot or on horseback.

His words and actions bespeak both common sense and sense of humor.

Early in World War II he was involved in two critical atomic research programs: the separation of isotopes and chain reaction research. Security rules forbade men in one to speak to men in the other.

"I was in the position of not being legally allowed to talk to myself," Professor Smyth has said.

After the war when some persons criticized his report for telling too much and thus constituting a breach of atomic weapons security, Dr. Smyth replied that the real security breach had been the explosion of the bomb over Hiroshima.

He was born in Clinton, N. Y., on May 1, 1898. He attended Princeton, where his father was a professor of Geology and, while completing a liberal education with Latin, Greek "and all the rest of it," decided to become a physicist.

Tommy Weber

*Wrote atom bomb's story*

**Studied with Rutherford**

His first PhD was from Princeton. The second was from Cambridge University, which was loath to accept American scientific credentials alone. He studied there under the great Ernest Rutherford.

Joining the Princeton faculty in 1924, he became chairman of the Physics Department eleven years later and held that post until 1949.

In 1936 he married Mary de Coningh of Chicago.

Dr. Smyth was one of the American physicists earliest involved in the atomic bomb project. He also had the task, throughout the war, of running the Physics Department at Princeton with a heavy student load and virtually no teaching staff. Most of his staff was involved full time in war work.

From 1949 to 1954 he was a member of the Atomic Energy Commission. In June, 1954, he was the sole member of that five-man commission to vote against denying access to Government atomic information to Dr. J. Robert Oppenheimer.

At present, in addition to his duties concerning the International Atomic Energy Agency, Professor Smyth is chairman of Princeton's University Research Board and also holds the post of Joseph Henry Professor of Physics.

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York, N. Y. THE NEW YORK TIMES, SUNDAY, DECEMBER 3, 1961

# Scientist Would Form Council To Lobby for Abolishing War

## Szilard Wants Group to Have a Full-Time Staff for Pressure on Capital

By AUSTIN C. WEHRWEIN
Special to The New York Times.

CHICAGO, Dec. 2—Dr. Leo Szilard has announced the establishment of a Council for Abolishing War that could spend $25,000,000 a year lobbying for peace.

Dr. Szilard, a biophysics professor who drafted the letter the late Albert Einstein sent to President Franklin D. Roosevelt on the feasibility of an atomic bomb, said the council would be made up of seven to twelve distinguished scientists.

"These men," he said, "would speak with the sweet voice of reason, and our lobby could see to it that they shall be heard by the people within the Administration and also by the key people in Congress.

In a lecture at the University of Chicago yesterday. Dr. Szilard said that, without drastic political changes, the world was "headed toward an all-out war" that the council was one of a number of ways to avoid this course.

The council, he said, would be like a board of directors for the lobby. The lobby organization would have a full-time staff, the council would have a set of political advisers. It is intended to create a "movement for abolishing war."

Those who joined it would agree to contribute 2 per cent of their total income.

### Expects Sharp Rise

Starting with a base of 50,000 students " who would go all out in support of the movement," Dr. Szilard estimated it could reach 500,000 members in twelve months.

He estimated that this would raise a fund of $50,000,000.

He raised the possibility that the movement could grow to represent 2,000,000 votes. He said it would use every form of personal and group lobbying to influence politicians and editors, columnists, television commentators and all others who help to influence public opinion.

It would make direct contributions to political campaigns, and would promise to deliver votes. Members would promise to vote solely on the "issue of war and peace," disregarding domestic issues.

Associated Press
Dr. Leo Szilard

Dr. Szilard, who has been on leave from the University of Chicago's Enrico Fermi Institute for Nuclear Studies, was one of those who worked with the late Dr. Fermi when the group he led achieved the first sustained nuclear chain reaction at the University of Chicago campus on Dec. 2, 1942.

His lecture, which he will now take to Harvard University, Swarthmore and Western Reserve University, was sponsored by the University of Chicago Law School and the Division of Social Science. He based some of his conclusions on long personal talks he has had with Russians in their own country in recent years.

### Political Objectives

Dr. Szilard's suggestion was grounded on the idea that it would be possible to formulate a set of political objectives "on which reasonable people could generally agree" and that it was conceivable that a sizable minority of the voting population could be counted on to give all-out support for such views.

Dr. Szilard said that the minority he had in mind would represent perhaps 10 per cent of the vote, but that its voice would be listened to if it could both deliver votes and make substantial campaign contributions. He said it would be "the most powerful lobby that ever hit Washington."

In outline, these were the political objectives he set for his movement:

¶American use of force should be limited to strategic bombing of cities or bases if the United States or its allies are attacked first.

¶If the atomic bomb is used for combat, it should be employed only in territory that is being defended.

¶American atomic weapons should remain in the control of American military commanders.

¶The President should issue an Executive Order against fighting "meaningless battles' in the "cold war."

The East-West cultural exchange program should be improved and intelligence activities involving tourists should be limited.

¶An influential private group should take the initiative in "helping or prodding" Government agencies dealing with disarmament questions.

¶An influential private group could be more effective in helping establish democracy in under-developed nations than new governmental bodies.

### Seeks Unilateral Steps

"We ought to look to unilateral steps that America might take, in order to have the danger of war recede, rather than to an agreement on arms control," the scientist suggested.

"With President Kennedy, new men moved into the Administration and many of them fully understand the implications of what is going on and are deeply concerned," he went on. But he said:

"They are so busy trying to keep the worst things from happening on a day-to-day basis that they have no time to develop a consensus on what the right approach would be from the long-term point of view."

He said one step would be for the United States to "liquidate her military commitments —without loss of prestige and without seriously endangering the interest of the nations involved" in those countries that circle the Soviet Union.

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EVA ZEISEL

# THE ELUSIVE DR. SZILARD

ALICE KIMBALL SMITH

*He is a bubbling spring of ideas—including a new theory of aging and the first patent on atomic chain reactions. But because he delights in a home-made cloak of mystery, he remains (except among scientists) almost unknown.*

AT A party in a university community a few weeks ago the guests amused themselves by drawing up a list of men who have played unique roles in recent history. They finally agreed upon five who had done things which could not have been accomplished, in their times, by anybody else. The first four are familiar to everybody—Lincoln, Gandhi, Hitler, and Churchill. But the fifth might puzzle even many well-informed people. It was Leo Szilard.

If they recognize the name at all, most people probably remember Szilard only as the man who persuaded Albert Einstein to sign a fateful letter to President Roosevelt—the letter which set in motion the building of the atomic bomb. This would please Szilard, who has gone to considerable pains to avoid notoriety; who has, indeed, sometimes seemed to take a sort of impish delight in creating around himself an air of mystery.

Yet among scientists (especially physicists and biologists) a Szilard legend has been flourishing for a long while. It grows out of his fantastic fertility of mind and his uncanny ability to conceive ideas before their time. It pictures him as an intellectual adventurer, likely to embark at any moment on some excursion far beyond the boundaries of science . . . dedicated to saving the world by a mild and legitimate conspiracy . . . unpredictable just because his behavior is so devastatingly rational.

One reason why this legend has not spread far beyond scientific circles is that he is a man of many interests, in an age when fame goes to the specialist. Although he is in no sense a dilettante, routine bores him. He loves to seize a problem in its early, exciting stage, and to work on it furiously until he begins to glimpse the answer. Then he is likely to move on to something else, leaving the tedious labor—and the laurels—to others.

Szilard claims he is lazy, and at first glance you might think there is some truth in this. At sixty-two he is comfortably overweight, and when he is in a mellow mood his round face looks benignly placid. More often, however, he radiates energy—talking with brusque impatience in a clipped speech which hints at his Hungarian origin by intonation rather than by accent. His reactions are always sharp and quick. Though you may not know what Szilard will think tomorrow, there is never any doubt what he thinks today.

He takes his extraordinary intellectual powers for granted. At present he is in a New York hospital for treatment of cancer. Lewis Strauss, the former head of the Atomic Energy Commis-

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sion, recently visited him there to present him with the Einstein medal for "outstanding achievement in natural sciences" and for his scholarship "in the broadest areas of human knowledge." Mrs. Szilard reminded her husband of the distinguished list of men who had received the medal previously.

"Yes," he said, "and it is getting better and better all the time."

This is a complex man, whose personality inevitably provokes argument. To some of his associates he has seemed gruff, demanding, even arrogant. It is true that he has no interest in conventional social chit-chat, and no patience with stupidity; but I can testify that he also can be charming and witty. Aggressive as he is in pushing his pet theories and causes, he has never sought the limelight for himself. He may haggle fiercely over details, but he also has a magnificent detachment and an almost saintly freedom from any sense of grievance toward his detractors.

### THE BATHTUB AT THE STRAND

SZILARD is one of a brilliant group of Hungarian *émigrés,* which also included John von Neumann, Michael Polanyi, Eugene Wigner, and Edward Teller. He believes this remarkable concentration of scientific talent grew out of a special environment in Budapest at the turn of the century—a society where economic security was taken for granted, a high value was placed on intellectual achievement, and physics was taught so badly that serious students were thrown upon their own resources.

The son of a civil engineer, he first studied electrical engineering in Budapest and—after a year of officer's training in World War I—in Berlin. There he transferred to physics, earning a doctorate in 1922. During the next decade he published papers on thermodynamics and X-rays. His outstanding achievement was a paper which is now regarded as basic to information theory and cybernetics—and therefore, in addition to much else, to the whole industry of electronic computers. He also filed a patent on the idea of the cyclotron (a machine later developed by E. O. Lawrence) and with Albert Einstein—his friend and associate at the University of Berlin—patented a device for pumping liquid metals.

In the early 'thirties Szilard's natural restlessness was intensified by his early recognition that Germany would soon become uncomfortable for men of independent spirit, and dangerous for non-Aryans like himself. He visited the United States, and returned so little reassured by the course of events that from then on he kept two suitcases packed in his room at Harnack Haus, the faculty club of the Kaiser Wilhelm Institutes in Berlin-Dahlem.

After the Reichstag fire in February 1933, he went to Vienna hoping to find posts outside Germany for anti-Nazi intellectuals. An encounter there with Sir William Beveridge, however, led to the less ambitious scheme of the Academic Assistance Council, set up in London in June of that year. With his help it carried out a memorable rescue operation.

Szilard himself went to work in the then-new field of nuclear physics, using a laboratory in St. Bartholomew's Hospital and later the Clarendon Laboratory in Oxford. At about that time Lord Rutherford announced that the idea of liberating large amounts of energy from the atom was sheer moonshine. Most scientists accepted this as gospel, since Rutherford was both a pioneer in exploring the atom and the most prestigious British physicist of the period.

But Szilard is congenitally suspicious of dogmatism—and besides his imagination had been stimulated by H. G. Wells' *The World Set Free,* which predicted the eventual release of atomic energy. So he began to think about the problem.

As he was waiting one day to cross a street in London, the idea came to him of a chain reaction based on some element which would absorb one neutron and emit two. What would be a suitable element? To ponder this question he needed leisure, for he believes that dreaming is impossible when a man is under a compulsion to accomplish something. He took a room at the Strand Palace Hotel in London, and during the early months of 1934 he did his thinking there in the most comfortable spot he could find—the bathtub. (Any scientist would see, he explained later, that a tubful of hot water provided the simplest way to keep warm during a London winter. Moreover, he was free from interrup-

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*Alice Kimball Smith had the co-operation of many friends of Leo Szilard in gathering ideas for this portrait. Mrs. Smith spent the war years in Los Alamos, where her husband, Cyril Stanley Smith of the University of Chicago, was in charge of metallurgy at the atomic laboratory, and where she taught in the high school. Herself a Ph.D. in history, she later became assistant editor of the "Bulletin of the Atomic Scientists" and taught at Roosevelt University. She is now working on a history of the postwar atomic scientists' movement.*

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tions, except for a worried chambermaid who would knock at the door now and then and ask, "Are you all right, sir?")

Considering the elements one by one, he first thought that beryllium might offer the possibility of a chain reaction. Later he vaguely considered thorium and uranium, although it never occurred to him that uranium might prove fissionable.

His hopes for testing his ideas by experiment were, for the moment, frustrated. Most physicists thought his notion of a beryllium chain reaction was fantastic; he had no funds for research; and apparatus built by a friend in America would not work when he set it up in England. Nevertheless he did take out a secret patent—which he assigned to the British Admiralty—in which the general laws governing chain reactions were described for the first time. His ambition then—and in later efforts to get patents on key atomic processes—was not to make a fortune, but to get control of what he even then foresaw as potentially a terrible danger. He hoped to entrust its development to a foundation, directed by enlightened men (not all scientists) who would use the results for the good of mankind.

### CORNERING THE ATOM

IN 1938 his chronic wanderlust, plus growing pessimism about the world situation, led him to the United States, in spite of the offer of a coveted lectureship at Oxford. In February 1939 he "materialized"—the phrase often used to describe his unannounced movements—as a guest at the Columbia University physics laboratory. Here Enrico Fermi, who had arrived a month earlier from Italy, was doing fission experiments with a student, Herbert Anderson.

Niels Bohr had just brought news from Europe that German scientists had induced fission in the nucleus of uranium. Szilard knew what this meant: The Germans would now try to build an atomic bomb, and with such a weapon Hitler could conquer the world—unless the Allies could get one first. On March 3, he and Walter Zinn performed an experiment which showed that neutrons are emitted in the process of fission. The same discovery was made at just about the same time by Fermi and Anderson in the basement of the Physics Building at Columbia, and by Joliot and his co-workers in Paris.

"That night," he said later, "I knew that the world was headed for trouble."

How Szilard used that knowledge is (at least to scientists) a familiar story. With the support of Wigner and Teller, he persuaded Einstein to sign a letter to the President explaining how the splitting of uranium atoms might be used to make "extremely powerful bombs of a new type." Although Einstein's famous formula $E = mc^2$ describes the relationship of mass and energy on which the bomb depends, he had no connection with its development. He was the country's most renowned scientist, however, and his letter—delivered to Roosevelt by Alexander Sachs—did move the government to action.

This devious approach illustrates Szilard's love of intrigue and indirection, plus his habit of moving outside established channels to get things done. In this case he was certainly justified. Twice the government had failed to respond to pointed hints about a possible atomic bomb—and Szilard had learned with alarm that Germany had prohibited the export of uranium from Czechoslovakia. The only other source was the Belgian Congo. Einstein was a friend of the Belgian Queen Mother, and through him Szilard hoped to warn the Belgian government against delivering uranium to the Germans from the Belgian Congo.

In the laboratory at Columbia, where he had joined forces with Fermi and Anderson, Szilard was full of ideas for better procedures. Their neutron source, radon/beryllium, was too high in energy; the piece of uranium to be bombarded was too small. A larger piece would produce more neutrons and hence more conclusive results. Beryllium and uranium were expensive and almost unobtainable, but shortly they appeared—the gift, said Szilard, of some friends of science. It later turned out that he had borrowed $2,000 from a friend, and that the "friends of science" were just a dream, expressing his hope that atomic energy might be developed under beneficent rather than military auspices.

Meanwhile, the laborious experiment itself was under way. Uranium had to be carefully packed in cans and round-the-clock readings made. Fermi, who switched easily from pad and pencil to the manipulation of apparatus, insisted that all share the work. Szilard did not take kindly to this proposal. Along with his willingness to take unreasonable trouble for others, his associates have noted a marked aversion to continuing responsibility, mere routine, or doing anything with his hands.

In addition, he felt that the outcome of the fission experiments was so important that he could not trust himself to do a painstaking job. So he hired a young refugee scientist to substitute for him on the night shift, leaving Szilard

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free to consider the meaning of the results. The incident produced a certain coolness between Szilard and Fermi, himself no tyro at thinking. Nevertheless, from these Columbia experiments emerged eventually the design for the first self-sustained chain reaction at Chicago's Stagg Field on December 2, 1942.

There was much concurrent thinking at this time in nuclear physics, but Szilard's special contributions included his stubborn exploration of the use of graphite to slow down the neutrons so that they would more readily hit uranium nuclei. And it was Szilard who wangled a government grant of $6,000 to buy graphite for which there were no laboratory funds.

Oddly, but quite characteristically, Szilard then left the experiments in the capable hands of Fermi and Anderson. Szilard had had the fun of sharing in the ideas. Fermi, for all his brilliance as a theorist, liked mucking about with mechanical things; Szilard, for all his inventive skill, did not. The prospect that the man who performed the experiment might be honored as a second Prometheus, if it occurred to Szilard, did not weigh with him in the slightest.

The organization of the Manhattan Project had begun in December 1941. Early in 1942, Szilard, Fermi, and others from Columbia moved to the University of Chicago's Metallurgical Laboratory—so-called to conceal its real purpose, the production of plutonium in a uranium pile.

If the project could have been built on ideas alone, says Eugene Wigner, Szilard alone could have done it. Others point out that without Fermi the pile would not have worked; but that without Szilard, plutonium production would have been delayed six months to a year. He made many contributions to reactor design, and his frequent disappearances from Chicago masked a kind of detective game in pursuit of pure graphite and uranium. In the spring of 1943 the Los Alamos Laboratory was set up to design and build a bomb, but Szilard stayed in Chicago and had no part in planning the actual mechanism.

## THE URGENT QUESTION

HE HAD long been haunted by the dread of hearing that an English city had been devastated by an explosion of incredible force. In the winter of 1944-45 this fear was replaced by another. What if the bomb were dropped, not as a defense against a similar weapon but upon Japan when her defeat seemed assured? It had been necessary to make a bomb. But was it now really necessary to use it?

In fact, Szilard thought, its use might enormously complicate our relations with other nations, especially Russia, and set off an arms race of terrible dimensions. These were the chief ideas he set forth in a memorandum addressed to President Roosevelt in March 1945. But before Szilard could see him, the President was dead. In May he presented the memorandum to James F. Byrnes—soon to be Secretary of State—but was met with utter incomprehension.

Szilard's concern was fully shared by some of his colleagues. On June 11, a month before the bomb was tested at Alamogordo, an informal committee, headed by the revered German physicist, James Franck, sent a carefully argued memorandum to Henry L. Stimson, Secretary of War, urging that the bomb's destructiveness be demonstrated on some uninhabited area.

The majority of the Franck Committee thought that in the atmosphere of wartime their plea would be more effective if it were based on political rather than moral argument. Although Szilard signed the report, he also drew up a petition to President Truman urging on moral grounds that the bomb not be used. Some sixty signatures were collected. When the Army tried to stop circulation of the petition in Chicago because it revealed that a bomb was being made, Szilard effectively protested, but at the other sites it was not allowed to circulate. Probably it never reached the President, either.

When the bomb was dropped on Hiroshima on August 6, and on Nagasaki three days later, those who had worked on it experienced a twofold reaction—elation at their success in helping end the war, and horror at their part in mass destruction. Those who had tried to find an alternative felt only deep dejection and began to talk about a scientists' organization which might help insure that atomic power would be used for peace, not war. Such groups sprang up spontaneously at other Project laboratories, then merged in a national federation to promote international control of atomic energy.

The Army asked the scientists not to discuss the implications of the bomb, Szilard recalls—not saying why, but giving the impression that negotiations were going on among the U. S., Britain, and Russia that might be disturbed by public discussion. The scientists of course complied.

In September Szilard made a trip to Washington to find out what kind of thinking was going on, and there picked up a copy of the May-Johnson Bill. Back in Chicago, he was advised by a Law School friend that it was a bad

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bill. Hearings before the House Military Affairs Committee took place while he was in Chicago and lasted only one day.

Szilard raised the alarm. With influential scientists like Harold Urey and E. U. Condon, he roused interest in an alternate plan for civilian control and returned to Washington for six months, on leave from the Project without pay, to promote it. He kept in touch with his young friends in Chicago, Los Alamos, and Oak Ridge whose program of public education played a vital part in the eventual victory for civilian control. However, it was Szilard's astute intervention that stopped the May-Johnson Bill from being passed by default. He once remarked to a friend that "baiting brass hats" was a favorite hobby. Certainly he had ample opportunity to practice it during his feud with General Leslie R. Groves, which reached epic proportions in the autumn of 1945. Wartime rules about what scientists in one category could discuss with those in another infuriated more tractable men than Szilard—but his protests were doubly offensive to security officers because in 1939 he himself had caused a brief furor by suggesting that publication of fission experiments be suspended. Now he complained about secrecy!

But Szilard's primary objective—getting a bomb before Hitler did—had not changed, and he later told a Senate committee that eighteen months had been lost because one part of the Project did not know what another was doing.

General Groves, on the other hand, charged that Szilard repeatedly ignored the rules. And he was further outraged that Szilard, without whom there would have been no bomb, now objected to using it. Szilard's direct appeals to the President violated every canon of military behavior, and his attack on the May-Johnson Bill added a crowning insult to a long list of injuries.

Nor had Szilard been an unalloyed joy to his civilian superiors, even though they too disliked secrecy and fully understood the value of his catalytic mind. They had to spend days meeting his demands for improved procedures and in explaining him to the General or his deputies.

## SWITCHING TO A NEW CAREER

IN 1946 Szilard decided to do research in biology—a turning from death to life that seemed to reflect his deep revulsion after Hiroshima, though he himself says only that the new field offered the greatest intellectual challenge. In recognition of his concern for the political implications of the bomb, the University of Chicago gave him a joint appointment in the social and biological sciences.

Szilard's demands upon the university were modest. He wanted no big machines or corps of assistants; only a secretary, no teaching responsibilities, and a chance to travel. (Subsequently, his feats of ubiquity were to include a professorship in Chicago, a home in Denver, and a visiting chair at Brandeis while he was actually living in New York.) To insure his own freedom from restrictions, Szilard—with his special brand of guile and comedy—decided to apply for funds only for research already completed. Then he could use the money on new projects of his own choosing. (This system worked until an application was refused on the grounds that the experiment was impossible.)

He began his research with the assistance of a young chemist, Aaron Novick, and their work on the genetic characteristics of viruses quickly opened up important studies of mutations. They invented the chemostat, a device for growing bacteria and observing mutations under controlled conditions.

But his most important contributions are, as one man phrased it, "lost in a thousand conversations." The reputation of most biologists, as indeed of most scientists, rests upon one idea thoroughly developed; Szilard spews them out at the rate of a dozen a day and rarely exploits any of them.

Biology has attracted many alert young minds, and Szilard may find their *esprit de corps* like that of an earlier generation of physicists. However, his reception in the field has not been uniformly warm. His fundamental knowledge is not wide, as it was in physics, and he is unwilling to acquire it systematically.

At a recent summer conference in Boulder, his friends devised "the Szilard index" based upon the number of sentences a speaker could finish before Szilard got bored and—often rather rudely—walked out. His references to third-rate scientists and to the stultifying effect of excessive experimentation electrified a session. The more experiments we do, he said, the more stupid we can be. If we just keep on doing experiments it will take fifty years to solve the problems we are discussing, but if we stop and think how, for example, proteins might be synthesized we will see that there are not fifty, but perhaps five, possible ways. Assign probabilities to the five and it will take only a few experiments to distinguish them.

Often Szilard took refuge from meetings he found dull, on the roof garden where other

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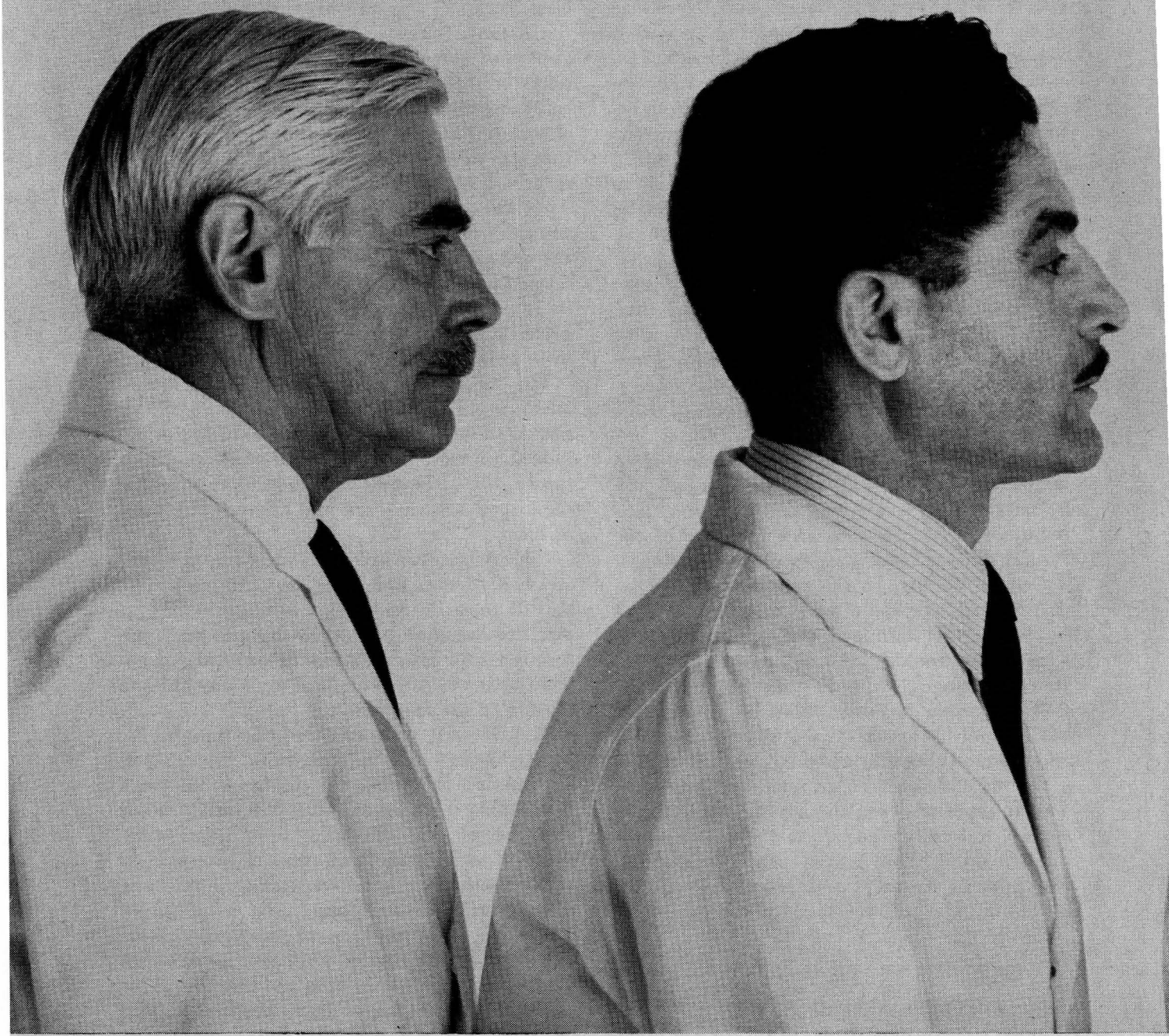
"Mein Herr, jawohl, durch...

$$\psi(x) = \frac{1}{\sigma(2\pi)^{1/2}} \exp\left(-\frac{1}{2}\ \frac{x^2}{\sigma^2}\right)\ldots"$$

"El próximo año

$$P = \frac{A}{A\text{-}B} E_{N,A} - \frac{B}{A\text{-}B} E_{N,B}\ldots"$$



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"Thank you, gentlemen.
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your countries has been
of infinite value to us.
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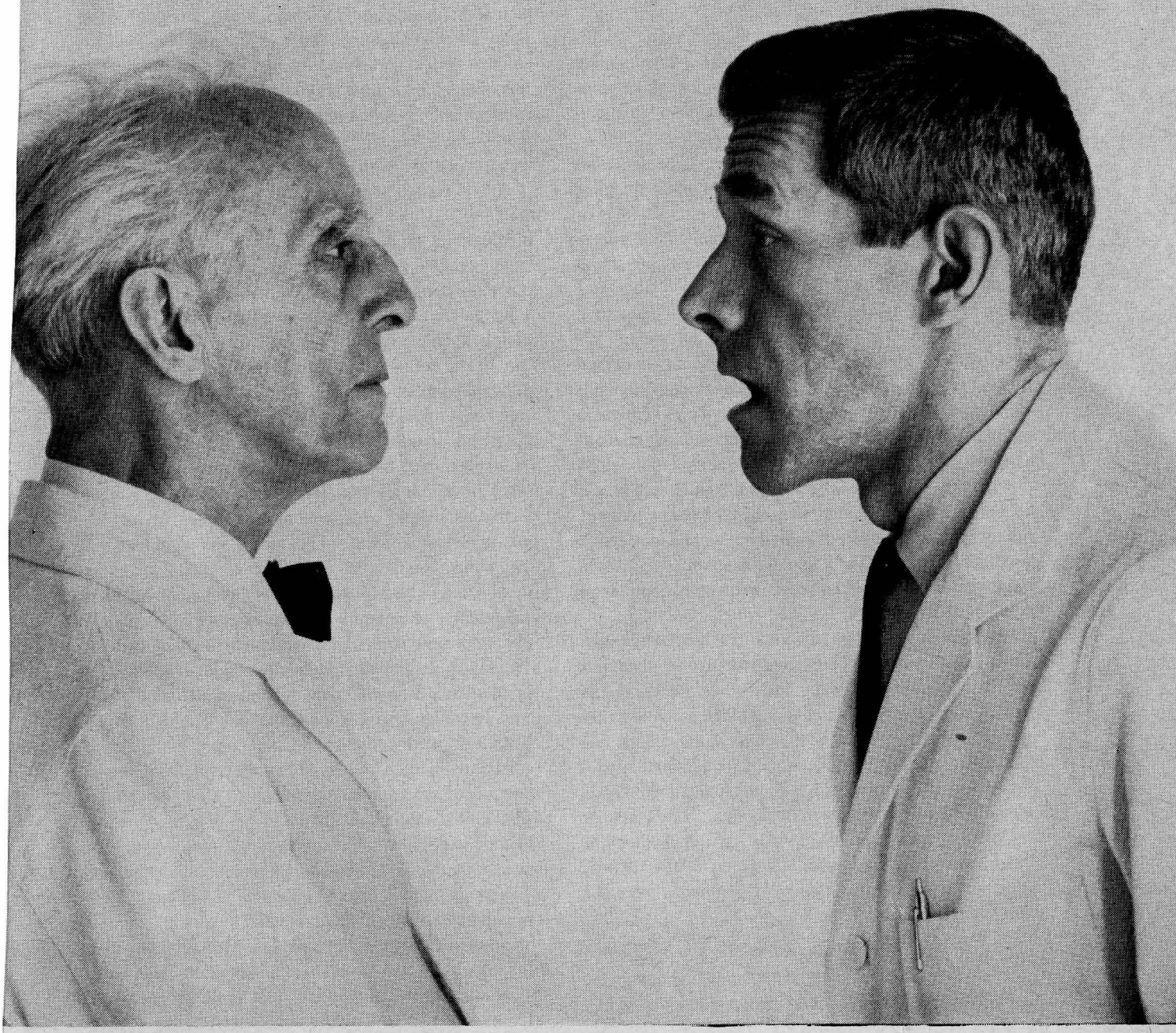
automated post offices are going
to be as American as apple π."

'il vous plaît...

$I(x) = \sum_i^n p_i \log \frac{1}{p_i} = -\sum_i^n p_i \log p_i \ldots$"



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tellite system that could make worldwide TV a matter of a few ears. As a signal can be bounced from one planet to another, can an idea grow in bouncing from one mind to nother. International Telephone and Telegraph orporation, 67 Broad Street, New York 4, N. Y.

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renegades soon joined him. There he sat under a large sun umbrella, notebook and slide rule in hand, apparently engrossed in his own work. But when the conversation around him touched an exciting technical problem, he suddenly offered pertinent suggestions or criticisms, then returned to his calculations.

"Why spend money on meetings?" inquired an admirer when this conference was over. "Just send people to talk to Szilard."

Biologists do not agree as to the value of his current work. One of his most provocative papers, for example, deals with the aging process. Some call his theory nonsense; others think it has revolutionary significance.

To Szilard, however, change is a basic tenet of life. "Devote six years to your work," he once wrote, "but in the seventh go into solitude or among strangers so that your friends, by remembering what you were, do not prevent you from being what you have become."

By design, he himself strikes no deep roots. "Leo's home," says a friend, "is wherever his intellectual interests happen to be at the moment." In recent years it has been at the faculty's Quadrangle Club on the University of Chicago campus; his room there is as devoid of personality as if he had dropped in overnight. He does not smoke, has little interest in alcohol, has never owned a car or a house. But his frequent travels, his lavish use of long-distance calls, and generous gestures made with a European sense of style have produced an erroneous impression of large private means.

His marriage in 1951 to an old friend of Berlin days, Dr. Gertrud Weiss, has not much changed his ways, although the periods when he takes his work to Denver, where she practices medicine, mean much to them both. There he keeps his recordings, chiefly Beethoven and Mozart, and—confuting the common belief that he never reads—a collection of his favorite books. They reflect a catholic taste: H. G. Wells and Shaw, *Tom Jones,* Boswell's *Johnson, Gone with the Wind, Sons and Lovers,* and the works of what he calls "English lady novelists."

## RECIPES FOR TEA, RAZORS, TAXES, AND PEACE

HIS sudden arrivals and departures, his aversion for advance commitments, and his personal reticence are all a part of the oblique tactics in which he delights.

"Leo's technique in promoting one of his projects," says a lawyer friend, "is like a move in a billiard game where you hit one ball that hits another ball that drops seven in a pocket."

I well remember the chaos he created a few years ago in the office of the *Bulletin of the Atomic Scientists.* Szilard proposed to write a letter to Stalin. If it could be arranged for him to write to Stalin directly, the *Bulletin* would not print the letter; on the other hand, if official permission were refused, the letter must be printed immediately. Days were consumed in long-distance phone calls, in trips by Szilard to New York and Washington. Alternate articles were set in type and scrapped and the letter itself underwent ceaseless revision. Despite these exertions, the letter did not go to Stalin. It appeared eventually in a much delayed *Bulletin.*

All of which was something of an ordeal to its staff. But those who work with Szilard learn to be flexible, to be ready to drop yesterday's idea or procedure for one that seems (at least to him) more sensible today. This may entail retyping a letter fifty times because of a minor change—which a few associates have found insufferable. But many more have been firmly attached by his thoughtfulness, humor, and liberality with time and ideas. Szilard himself is mildly surprised by the prevailing human addiction to regular hours, schedules, and domestic obligations.

As in his work, he is unpredictable on social occasions. Inert and half asleep one minute, his conversation sparkles the next. With children and young people his magic never fails, whether he is doing bottle tricks for three-year-olds or counseling teen-agers about courses or careers. The proudest items in my six-year-old daughter's autograph collection were the signatures of Roy Rogers and Leo Szilard. His unpublished children's stories show a fine ear for the idiom of childhood and insight into its fears.

Szilard is something of an intellectual showman. For example, there is a story—perhaps apocryphal—that at lunch one day a young surgeon told him about a new operation, sketching the route of entry into the ear. "But why not go in this way?" asked Szilard. "By God," said the surgeon, "next time I will."

Sometimes he is occupied with quite trivial matters—how to speed up check-out counters in chain stores, a device for instant tea, the virtues of injector razors, or distributing copies of Dr. Spock.

On the other hand serious discussions on disarmament, freedom of research, new frontiers in science, acquire an extra dimension when Szilard takes part. If someone is accused of lunching with a Communist, said Szilard at a time when

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flimsy charges were being leveled at scientists, we should all take him out to lunch; if he is charged with reading the *Daily Worker,* we should all read the *Daily Worker.*

Occasionally he will develop all on his own some sophisticated idea which had long since been laboriously built up by specialists in other fields—for example, floating exchange rates or the theory of imperfect competition. Some of his other inspirations are less impressive. He once wrote a memorandum proposing a dual currency, with green dollars for wages and red ones for credit in the bank.

Taxes fascinate him. He once consulted a tax specialist in the Chicago Law School on behalf of the *Bulletin of the Atomic Scientists* because its tax exemption was in doubt on grounds that it discussed political questions. Szilard proposed that its articles should not lobby *for* anything; they should simply attack the opposing policy. Thereafter he spent hours hunting new ways of obtaining personal or institutional exemption; he thought, for instance, that a university should raise money by selling its tax-exempt status. He never read the tax law, but he detected skillfully hidden loopholes, then triumphantly offered clever and subtle schemes for plugging them up —taking five minutes to dispose of a problem that had occupied the tax bar for five years.

To both economists and lawyers many of Szilard's schemes seem like devices—gadgets almost—to achieve a simple short cut. Sometimes he displays a remarkably rapid and accurate understanding of an intricate situation. They note, however, a final level of complexity and sophistication that Szilard often fails to reach—the level on which human beings operate. For example, his ideas on how to avoid taxes or finance a university, though legally impeccable, had a Rube Goldberg quality that would send shudders down the collective spine of a group of lawyers or a board of trustees.

This perhaps is why his foundations to administer science for the benefit of mankind remain a dream. Many responsible people do not like to be perpetually nudged into action; they need to be soothed and reassured, and Szilard is not the man for this. In the case of the May-Johnson Bill he made a superb gadfly, alerting scientists and the public to the danger of military control. But when it came to getting a substitute bill through Congress, those who could persuade and mollify were more effective.

Despite his gadfly quality Szilard can be patient and detached. For months he was preoccupied with a problem in biology; he worked constantly, and a tolerant neighbor at the Club often heard the bath water running at two and three in the morning. When the period of seclusion ended the friend asked how the research had come out. "Oh," said Szilard with complete composure, "it was not a good idea." During recent months of illness, this same detachment, salted with touches of ironic humor, has lightened the burden for those close to him and has at the same time moved them very deeply.

### A GIFT FOR PROPHECY

APART from biology Szilard has devoted sustained attention since the war to population control. With a handful of young disciples he once braved a largely feminine luncheon of the Planned Parenthood Federation where a speaker described how beads used to keep track of infertile periods (in the rhythm method of birth control) tend to slip out of place. Szilard designed a clasp to prevent this and also proposed making it luminous. When asked how the Catholic Church regarded this gadget he replied smugly, "But these are fertility beads!"

Szilard has also taken a great interest in the *Bulletin of the Atomic Scientists.* In 1946, by persuading Einstein and other prominent scientists to make a nation-wide emergency appeal for funds, he rescued both it and the Federation of American Scientists from oblivion.

By far the most engrossing of Szilard's concerns has been international relations and the impact of the bomb upon them. He has written extensively on this subject for the *Bulletin,* often propounding ideas which are scoffed at as ridiculous, but have an odd way of looking like hard-headed realism within a few years. Early in 1947, for instance, he urged that the United States make outright gifts to develop consumer industries in Europe, the American reward to be increased trade. Three months later the Marshall Plan was announced. Similarly, his proposals that Stalin broadcast once a month to the American people and that the *New York Times* and *Pravda* carry exchange pages were less bizarre than the sight of a Russian premier eating corn in Iowa and American tourists swarming over Russia. He also foresaw Russia's reaction to our bomb and was one of the few leading scientists who accurately predicted the early date when the Soviets would have one.

Szilard complains that all methods of atomic inspection proposed so far have tried to solve a novel problem by pedestrian means. He tried out a more imaginative notion on a Russian

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scientist at the Pugwash Conference last summer: If you believe Americans are unduly suspicious, he said, why don't you turn this erroneous belief to your advantage? Let America make all the inspections she wants—but charge a fee for each one of several million dollars. If an illicit test has taken place, Russia would have to refund all the fees paid to date and pay a large fine; if no test has taken place, the fee would be forfeited. Russia would not need to limit the inspections; our Bureau of the Budget would do it for her.

Political scientists may feel that Szilard betrays the scientist's weakness for mechanical solutions and that conditions which would make some of his schemes workable would also render them unnecessary. But even conservative internationalists concede the soundness of certain themes that crop up again and again in his writings: international agreements so framed that no participant will want to break them; large-scale exchanges of students; mass migrations of peoples so that national boundaries may some day mean as little as American state lines; and an informed and educated public.

Constantly he returns to the goal of mobilizing men of superior intelligence—in both East and West—to solve the problem of war and peace. After an abortive effort or two of his own to promote private discussions with the Russians, he was at last able to participate in such exchanges at the several Pugwash Conferences of scientists—the first held through the initiative of Bertrand Russell in 1955 at the Canadian village of that name, the most recent in Baden, Austria, in July 1959.

### INTELLECTUAL WANDERLUST

I WAS once rebuked for speaking of Szilard's "non-scientific" interests. "Leo has no non-scientific interests," said my critic. "It is the essence of his endeavor to bring everything into the realm of science." This all scientists do up to a point—but the point varies, and few of them equal Szilard in the number of his concerns, or the consistency with which he applies his supreme faith that man's rationality is man's best hope.

Most scientists cling to the scholar's goal of learning more and more about less and less, and if they speak at all to non-technical questions they like to think that they do so from the firm base of a specialist's knowledge. Szilard, on the other hand, frankly offers advice about politics and social problems as a non-specialist who may for that very reason provide a new perspective. He likes to initiate a "chain reaction" by tossing out an idea or starting a project, then letting others carry on. But perhaps he himself does not entirely know whether this habit springs from his faith that human intelligence, properly directed, can alter society or from his magnificent intellectual wanderlust.

Has Szilard indeed played a unique role in the history of his times? Like most scientists he lacks the mystical quality, the desire to be a leader of men. His scientific contributions would have been made sooner or later by someone else. Even the building of an atomic bomb would have been proposed before long. But this is not the point. If Szilard does indeed belong among the illustrious it is not just because he was associated with one of the great events of history, the harnessing of atomic energy. To precipitate an event is not uncommon. But to show one's contemporaries its significance is to become a strong candidate for the company of the great.

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PHILIP BOOTH

## MAINE

WHEN old cars get retired, they go to Maine.
Thick as cows in backlots off the blacktop,
East of Bucksport, down the washboard
from Penobscot to Castine,
they graze behind frame barns: a Ford
turned tractor, Hudsons chopped to half-ton
trucks, and Chevvy panels, jacked up,
tireless, geared to saw a cord of wood.

Old engines never die. Not in Maine,
where men grind valves the way their wives
grind axes.
Ring-jobs burned-out down the Turnpike
still make revolutions, turned marine.
If Hardscrabble Hill makes her knock,
Maine rigs the water-jacket salt: a man
can fish forever on converted sixes,
and for his mooring, sink a V-8 block.

When fishing's poor, a man traps what he can.
When salt-rust speeds a Bangor hearse towards
death, the body still survives:
painted lobster, baited—off Route 1—
with home-preserves and Indian knives,
she'll net a parlor-full of Fords, and haul in
transient Cadillacs like crabs; Maine trades
in staying power, not shiftless drives.

Beatrice Stern research files, Vertical Files, Box 5, Articles
From the Shelby White and Leon Levy Archives Center, Institute for Advanced Study, Princeton, NJ, USA

THE NEW YORK TIMES, SUNDAY, JANUARY 21, 1962

# A.E.C. Contracts May Permit Profit for Nonprofit Institutions

## Commission Acknowledges a New Pact With U. of Chicago Could Produce an Excess for Its Argonne Laboratory

Special to The New York Times.

WASHINGTON Jan. 20—The Atomic Energy Commission has informed Congress that a new contractual arrangement with universities could permit the nonprofit institutions to make a profit on running the commission's national laboratories.

In a letter to the Joint Congressional Committee on Atomic Energy, the commission acknowledged that the University of Chicago might very well make a profit on a recently negotiated contract for running the Argonne National Laboratory in Lemont, Ill.

The letter illustrated the changing financial relationship between the commission and several large universities that have million-dollar contracts to run the commission's national laboratories.

Since World War II, it had been the commission's policy to pay the universities their direct costs plus their identifiable indirect, or administrative, costs. Recently, largely because of the difficulties and arguments in establishing the indirect expenses, the commission has been shifting to a policy of paying the universities a flat management allowance for running the laboratories.

In effect, the universities are being placed on much the same cost-plus-fixed-fee basis that is used for compensating private companies on commission research projects. And as in the case of the commercial contracts, there is a possibility, if not an expectation, that a certain amount of the fee will represent an excess over costs, or a profit.

### Compromise Agreed on

In explaining why it had shifted to a management allowance for the University of Chicago, the commission gave this account of the negotiations:

The university estimated that its "properly allowable central administrative expense" was $1,600,000 a year. The commission estimate was $600,000. During the discussions at the commission's Chicago operations office, it was suggested that as a compromise the commission pay an annual management allowance of $1,200,000. The commission accepted this proposal as a reasonable compromise.

In answer to committe inquiries as to whether this arrangement would permit the university to make a profit on the contract, the commission offered this reply:

"So far as the A. E. C. is concerned the difference between the A. E. C.'s estimate and the compromise figure may well represent a payment in excess of costs properly allocable to the contract, and any such excess would be a fee or profit.

"On the other hand, the university argues very forcibly that the compromise figure does not fully compensate them for central administrative expenses incurred under the contract."

The commission defended the arrangement as consistent with Government policy and regulations laid down for compensating universities, particularly for running off-campus research projects. These regulations specify that when the indirect services can not be readily determined it is permissible to pay a negotiated fixed fee not exceeding "a conservative estimate of anticipated indirect costs."

### Some Fears Expressed

What is causing concern in some quarters is a fear that the management allowance is being used as a subterfuge for giving Federal money to the universities rather than meeting their financial needs openly.

There also is a question in the minds of some commission officials as to how much the universities are actually contributing in the way of services to the laboratories. These are generally located off-campus and have their own administrative staffs. The Argonne National Laboratory, for example, is thirty-five miles from the University of Chicago.

The argument over the University of Chicago contract, which has still not been signed, has become wrapped up in a larger policy debate within the commission over the role and future growth of the national laboratories. Most of these were set up during and immediately after World War II.

In the last six years, the laboratories' nonweapons research budgets have been growing at a rate of about 10 per cent a year. The Argonne Laboratory expenditures, for example, have gone from $22,300,000 in the fiscal year 1956 to $42,500,000 in the last fiscal year. The other laboratories have shown these growth rates from 1956 to 1961:

Ames Laboratory, run by Iowa State University, $2,300,000 to $4,000,000; Brookhaven National Laboratory at Upton, L. I., run by Associated Universities, Inc., $11,500,000 to $25,100,000; Lawrence Radiation Laboratory, run by the University of California, $13,800,000 to $52,100,000; Los Alamos Scientific Laboratory, run by the University of California, $6,300,000 to $29,200,000; and Oak Ridge National Laboratory, run by the Union Carbide Nuclear Company, $50,400,000 to $61,100,000.

### Growth Rate Questioned

The policy question being debated within the commission is whether this seemingly built-in growth rate should continue.

Complicating the debate is the prospect of a diminishing work load for the laboratories in certain important areas of research, such as atomic power reactors, which are reaching the point of industrial development. If the laboratories are to continue to expand, therefore, new research tasks must be found for them.

One proposal now being considered is that the Oak Ridge Laboratory be permitted to expand into the nonnuclear research field of saline water conversion.

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1/21/62

# Alexander Loveday, 74, Dead; Was British Economics Expert

OXFORD, England, Jan. 20 (AP)—Dr. Alexander Loveday, for many years a member of the Secretariat of the League of Nations and a former warden of Nuffield College, Oxford University, died last night in his home. His age was 74.

Dr. Loveday served for a time on the Nuclear, Economic and Employment Commission of the United Nations.

Educated at Cambridge University, he held lectureships at Leipzig University and Cambridge. He served in the British War Office from 1915 to 1919.

Dr. Loveday joined the League of Nations Secretariat in 1919, serving for twenty-seven years. He was director of the League's financial section and Economic Intelligence Service. From 1939 to 1946 he was director of the League's Economic, Financial and Transit Department.

He was a member of the United Nations Commission until 1950, then became warden of Nuffield College here, a post he held until his retirement in 1954.

Dr. Loveday is survived by two sons, Thomas and Alexander D., and a brother, the Very Rev. David Loveday, who is Bishop of Dorchester.

**Came to U. S. in 1940**

Dr. Loveday came to the United States in 1940 with microfilmed records and established an office at the Institute for Advanced Study at Princeton University. Eight of his staff came with him and twelve remained at Geneva. As the war spread, others came until his staff at Princeton numbered thirty members.

A large store of full-size documents was added to the microfilmed records, and this library of statistics and reports on economic conditions throughout the world was turned over to the United Nations.

Dr. Loveday was the author of "Britain and World Trade," "Quo Vadimus and Other Essays," "A Study of Democracy in Danger," "The Lessons of Monetary Experience," and other books and treatises on economics.

He warned in 1943 that Government economic controls should not be removed when the war ended, as if on signal. He said they should be retained "until the war is really ended; that is, when the need for urgent commodities is overcome."

Dr. Loveday noted that after World War I, in the rush to return to business as usual, "every effective control was trampled underfoot," and he cited this as a factor in the post-war depressions.

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# *This Is* PRINCETON

**AT THE "CROSSROADS"**

**School Is Small UN.** A United Nations in miniature, complete with babel of tongues, colorful personalities from all the nations and occasional dissension on a truly nuclear scale, meets each weekday morning at the Institute for Advanced Study.

The Crossroads Nursery School on Einstein Drive holds, within its fragile walls, 30 small, volatile, explosive children, ranging in age from 2½ to 4 and in nationality from Swedish to Chinese to Belgian and back again.

"I know how to say, 'I have to go to the bathroom' in 15 languages," comments Mrs. Everett P. Tomlinson, director of the school.

Crossroads is open to the children of all members of the Institute for Advanced Study, including the administrative staff. After Institute families have been accommodated, the school considers applications from other parents.

**Here I Am.** Institute families move to Princeton for the academic year and enroll a child in the school almost before his feet are dry from the ocean crossing.

He probably does not speak English. He is, quite possibly, mixed up about exactly where his home is. He may have complex and quite adult, cultural problems—like those of the small Israeli who happened to be one of those children everybody likes to tease, and who thought he was persecuted because of his faith.

"We treat all these children exactly alike, no matter what their cultural background," Mrs. Tomlinson explains. "Language presents a problem, of course, but they pick English up in a hurry because they don't hear anything else here in the school."

"'Time for crackers' or 'Let's play a game'—you learn to understand sentences like this pretty quickly. On the other hand," Mrs. Tomlinson muses, "you'd be surprised how blankly they can say 'Don't understand' if you ask them to do a chore."

Communication with members of the school staff is not the only problem. One must also communicate with one's peers, who probably don't speak English either.

"We had one wonderful squabble between Beatrice, who speaks only Swedish, and Henry, who speaks Italian," Mrs. Tomlinson recalls.

**"E la mia!"** "It concerned the possession of a tricycle. Beatrice grabbed Henry's and Henry objected. He shook the handlebars and let forth a perfect stream of flawless Italian. She couldn't understand him, and neither could I, but there was no doubt in either of our minds about what he meant. She let go of the bike."

Occasionally, Mrs. Tomlinson will resort to a small library of "Say it in . . ." language books to see whether she can find a phrase that will penetrate the language wall.

Her assistant, Mrs. Guy Williamson, is a Swedish teacher who speaks, besides her native language, both Danish and German, and this fluency is more than helpful.

Actually, language is not an insurmountable problem for us," says Mrs. Tomlinson. "If a family is only going to be at the Institute for a year, we encourage them to speak English at home. But if they plan to stay permanently, we say 'speak your own language at home,' because we think it's important for a family to retain its culture if they are going to be permanently in an alien country."

**The Parent Adjusts.** Within this group of small Chinese, Norwegians, Swedes and Britishers, there are, naturally, cultural differences. Very often, these show up more in the parents than in the children, Mrs. Tomlinson says.

For many years—Mrs. Tomlinson has directed the school for a decade—there were no Japanese children at all. Within the close frame of the traditional Japanese family, there was no place for nursery school experience.

But one year a Japanese father, who had lived in India and England, decided that his children should be exposed to other peoples and other languages, and so he enrolled his child at Crossroads.

"He stayed with the child every day until he was adjusted," Mrs. Tomlinson says, "and when I say, 'he was adjusted,' I'm actually speaking as much of the father as of the child."

**Chinese Retain Language.** Since then, many Japanese children have been on the Crossroads roll, although there are none this year. "This is our Chinese year," Mrs. Tomlinson comments.

This year's Chinese children were all born in the United States, but they come from families where only Chinese is spoken. The parents feel such alienation from China that they retain all they can of the Chinese language and way of life, Mrs. Tomlinson says.

There was also a Japanese mother who came each morning for the full school year. By the second year, she had picked up English and was able to explain and interpret the "why" of things in the nursery school to new Japanese mothers who were baffled by these strange American doings.

Parents do more than send their children to Crossroads and watch anxiously as they assimilate American ways. Mothers and fathers also run

—Continued on Page 4

*NOTICE*

*TOWN TOPICS regrets that it has underestimated the demand for copies in recent weeks and that readers have often been unable to obtain them at various newsstands after Thursday. In order to provide what is believed to be an adequate supply, this week's circulation has been increased to 13,800 copies.*

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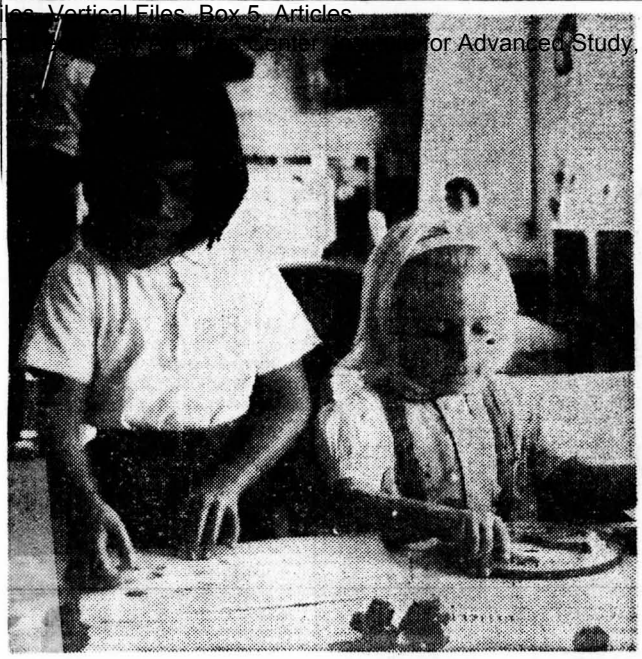

**NEAR AND FAR: Angie Wang, (left), enjoys a morning of play with Pam Cheeseman, her colleague at Crossroads Nursery School. Angie's parents are Chinese, Pam's American. Young Henry Cook (right), was born in Italy and, in startling contrast to his name and his shock of tow hair, speaks only Italian. "Signora!" is his imperious summons to the school teacher. (Staff Photos)**

## *This Is Princeton*

—Continued from Page 1

the school, which is an education in itself for a foreign-born man and his wife—especially for his wife.

All parents assist in maintenance and repair of toys and equipment, and the inventive minds of Institute fathers (and mothers) often produce some magnificently imaginative toys, like the locked drawbridge-tunnel complex, made out of coffee cans and ingenuity, and the workbench with its secret compartment for things the staff would rather keep out of three-year-old hands.

Parents and children and staff are always conscious of the school's unusual international texture — they can scarcely escape, as a matter of fact—and the children gather with keen interest around the wall map and the globe, to show where their parents came from, or where they themselves were born.

At the beginning of the year, Mrs. Tomlinson puts pins in the map to show where everybody began and by the time she has finished, the wall map is as bright with color as a fingerpainting. "Crossroads" is indeed an international intersection.

### ROUND UP

Despite the presence of 42,000 spectators in Palmer Stadium for the Yale football game Saturday, Borough and Township police report that the weekend was quiet. . . thefts were at a minimum, with only one camera reported stolen by a patron of the Nassau Coffee Shop.

The lone accident was not actually a part of post-game traffic, occurring at 9:40 Saturday night at the intersection of Elm and Rosedale. . . a car proceeding south on Elm struck another broadside while it was crossing from Rosedale to Cleveland. . . nine persons in all, four in one car and five in the sceond, were injured—two of them seriously enough to require admission to Princeton Hospital. . . all are from outside the Princeton area.

Borough police posted streets near the Stadium as closed to parking on the day of the game, then towed away a record 24 cars for violating the law. . . owners paid fines, plus towing charges.

Township police point out that the 1961 deer season will run from December 11 to 16, and advise all property owners whose land may be eyed by hunters to re-post with fresh signs where needed.

An inch and a half of snow fell early Monday, first of the season, as the thermometer dipped below freezing for the third straight day. . . last week's high was 65 (on Monday), but thereafter winter drew nearer, with no reading above 46 since Friday.

Mrs. Gloria Michael, whose resignation from the Housing Authority took place last month, gave up her position as a member so that she might accept appointment as its executive director. . . she is now serving in that capacity.

Official election returns from the state's 21 counties show that Judge Richard J. Hughes was the victor over James P. Mitchell by 34,415 votes—about 12,000 more than President Kennedy's margin last year over Vice-President Nixon. . . Judge Hughes polled 50.4 percent of the two million votes cast, Mr. Mitchell getting 48.7 and seven "splinter candidates" the remaining .9 percent among them. . . Judge Hughes carried Mercer, 61,393 to 37,366.

A purse containing the owner's household money for the month, her son's recent earnings, as well as personal papers and a pair of eyeglasses, was last seen at the Family Service Agency, 120 John Street. . . the finder is asked to return it there or to Mrs. Caroline Adams, 74 Clay Street.

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YORK TIMES, FRIDAY, NOVE

# New York

## 'The Shame of the Cities' Gets Worse

By JAMES RESTON

When President Kennedy came to New York yesterday, he gave Mayor Wagner a bubble-top ride from the airport and the usual statement of support. He didn't snub him, but he didn't campaign for him, either.

The ride must have been fun, but the statement was dutiful and dry, like kissing your sister.

Behind this kiss-and-run visit lies a careful Kennedy calculation. He is starting a new generation of Democratic political power in the nation. That power in the past has rested primarily on the big-city machines. These machines helped elect him just a year ago, but he is well aware of the rising population and problems of the cities and of the failure of his party to deal effectively with these problems.

Accordingly, he has been talking a lot in private lately of the importance of municipal reform. He is a politician first and foremost, as his statement of support indicates, but he is a good enough politician to know that he cannot build a new generation of political power on outmoded machines that have not kept pace with urbanization in America.

This is why he has been talking about the importance of internal reform of the Democratic organizations and why he does not want to get himself too identified with a New York machine that has been a symbol of inefficiency and easy ethics for years.

### Steffens' Advice

It is now fifty-seven years since Lincoln Steffens wrote "The Shame of the Cities" and he was able to say then what no good reporter could say today: that New York was better governed than Chicago, Philadelphia, St. Louis, Minneapolis or any of the others he studied.

Kennedy himself, and his brother, the Attorney General, came out of the Presidential campaign appalled at the selfishness and obsolescence of the Democratic machine in New York, and while they were no doubt consoled by the victory New York gave them in that election, they were far from satisfied about the permanence of an organization that had got so far out of touch, not only with modern political techniques, but with the needs of a growing population.

The President has a special personal reason for concerning himself with reform. He is identified with the Democratic politics of Boston, which are about as bad as politics come, and he is known to have said on several occasions since entering the White House that no party can hope to retain national political power if it is identified with bad municipal government in the urban and suburban cities of the North.

In the East Coast metropolitan belt alone, stretching from Boston in the North through Washington and Baltimore below the Mason-Dixon line, live more than 31,000,000 people, almost 20 per cent of the total population of the nation.

This vast metropolitan area, most of it dominated politically by the Democratic party, is divided into a bewildering complex of overlapping and often bickering governments.

In these ten states from where Kennedy came from to where he lives now are twenty-three large urban areas: Lowell-Lawrence, Haverhill, Boston, Brockton, Fall River, New Bedford, Springfield-Chicopee-Holyoke and Worcester, all in Massachusetts.

Also New York, Atlantic City, Jersey City, Newark, Paterson-Clifton-Passaic and Trenton, N. J., where he made an old-fashioned, Boston, rabble-rousing speech last night. And South and East from there, Allentown-Bethlehem-Easton, Harrisburg, Lancaster, Philadelphia, Reading, and York, Pa., followed by Wilmington, Del., Baltimore and Washington.

In this sprawling conglomeration, which can easily hold the balance of national political power, there is probably more bad government than in any other urban complex in America, most of it identified with the Democratic party. No wonder then that, despite all his other international preoccupations, the President is now making the rounds and talking, as he did privately to Mayor Wagner today, about the importance of reform.

Whether this will ever come about without a dramatic defeat for the Democratic party in New York and New Jersey, however, is highly dubious. Politicians seldom reform what wins.

In "The Shame of the Cities," Mr. Steffens made the point very clearly over a half a century ago. "The people are not innocent," he wrote. "If our political leaders are to be always a lot of political merchants, they will supply any demand we may create. All we have to do is to establish a steady demand for good government."

Steffens' conclusion was: Vote by ll means; vote for the more promising ticket, regardless of party; and hen in doubt, throw out the "ins." "If we would vote in mass on the ore promising ticket, or, if the two e equally bad, would throw out e party that is in, and wait till next election and then throw out other party that is in—then, I , the commercial politician would the demand for good governnt and he would supply it."

his was pretty good advice even n America was primarily a rural on; it is even better now when size and shame of the cities are ter.

Beatrice Stern research files, Vertical Files, Box 5, Articles
From the Shelby White and Leon Levy Archives Center, Institute for Advanced Study, Princeton, NJ, USA

# Critic at Large

## The Arctic, No Longer So Remote, Is Still a Land Where Life Can Be Cruel

By BROOKS ATKINSON

AFTER hop-skipping by plane across the Arctic several weeks ago, Walter Sullivan, the New York Times' licensed iceman, came home with a map of northern observation stations.

To the armchair traveller, the place names were startling. Cornwallis Island, where an elaborate tracking station has been installed in the snow. Melville Island. Banks Island. Prince Patrick Island. All these remote, ice-choked outposts are now accessible by plane and in the summer by ship; and all of them can communicate by radio with the clement parts of the world.

But readers of Arctic travel know that a century or so ago the men who set foot on these places had struggled for months to get there. The sledging parties as well as the ships' crews were also swallowed up in silence for two or three years while they were pitting their strength and ingenuity against the savage weather of the Arctic. Every victory represented tedious and shattering physical labor performed in isolation from the rest of the world.

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In 1850 some seamen, iced up for the winter near Cornwallis Island, sent two carrier pigeons home to Scotland as a sort of gay and improbable experiment. Five days later one of the pigeons arrived home in Ayr, three thousand miles away. The message probably said: "Wish you were here;" and, of course, a return message was impossible. But until the time of radio, this was the only direct communication from men frozen up in the Arctic with their homes.

No doubt, life in the Arctic is still rugged, and also dismal at this sunless time of year. The weather is brutal as ever. When a plane comes down today the passengers, if they survive the crash, find themselves back in the comfortless world of Frobisher, Ross and Franklin.

When Mr. Sullivan returned to Times Square, looking as if he had just come in from Westchester County, he reported that the two men assigned to one station had resigned and chartered a private plane to take them out. During the summer their supply ship had not been able to get closer than thirty miles to the station. The men could not undertake the labor of moving their winter supplies on foot over a rough and bleak terrain.

No one writing a column in a comfortable office has a right to question their judgment. As the technology of civilization advances, the mental attitudes of people advance with it. They cannot automatically revert to the primitive techniques of a century ago.

But when I read this note in Mr. Sullivan's report, I recalled the crushing, desperate experiences of Capt. John Ross and his party of twenty-two men who in 1829 sailed and warped a small coastal packet into an icy harbor on Boothia Peninsula, south of Cornwallis Island. Capt. Ross was prepared to spend one winter in the Arctic. He and his party did it in comparative comfort and general good spirits. But because of two pitiless summers they had to spend three winters there.

When the cold relented a little in August and September after their first winter, they set about moving their little ship by warping her through the ice. They moved her only 850 feet in a month. Then they realized that they were fated to endure another winter.

The next August they were able to sail her only four miles. Finally, they abandoned ship and proceeded overland, dragging heavy boats on sledges.

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Since they had to move their supplies in relays, they had to slog 329 miles to gain thirty. On another leg of the journey they had to go back and forth eight times to advance 256 miles. Of the original twenty-two men, nineteen finally made their way into Baffin Bay where they were picked up by a whaler.

The men now holed up in their huts on Cornwallis Island doubtless know that in 1845 Sir John Franklin and 129 men circumnavigated that island before they spent their first winter in Barrow Strait. "All well" was the report of that winter, found a decade later in a cairn by a searching party. But none of Franklin's party ever got home. Their terrible experience was memorialized in some further scattered records and skeletons, boats, abandoned equipment and a battered copy of "The Vicar of Wakefield."

It is not for nothing that place names in the Arctic bear such grim names as Fury Beach, Terror Bay, Starvation Cove. Good luck to the men now encased in the darkness, blizzards, and cold of another Arctic winter.

Beatrice Stern research files, Vertical Files, Box 5, Articles
From the Shelby White and Leon Levy Archives Center, Institute for Advanced Study, Princeton, NJ, USA

THE NEW YORK

# Tough-Minded Physicist

## Dr. Hans Albrecht Bethe

"PEACE will be the greatest discovery of our time," Dr. Hans Albrecht Bethe was reported to have said over lunch about four years ago. Remarks that he made yesterday when he received the Enrico Fermi Award in White House ceremonies indicate that the feeling persists in the mind of the man who has made many great discoveries himself.

**Man in the News**

He wondered, Dr. Bethe said, if the nation's security was actually served by the perfection of weapons as terrible as the hydrogen bomb. He has declared many times his belief that such developments will not lead to peace.

This may seem strange, coming as it does from the scientist whose direction of the Theoretical Physics Division of the weapons laboratory at Los Alamos, N. M., from 1943 to 1946 figured largely in the development of the atomic bomb. And yet, Dr. Bethe (pronounced like the Greek letter, beta) in 1950 fought against the subsequent development of the hydrogen bomb with the same tough vigor with which he had worked for the smaller nuclear weapon.

But Dr. Bethe is not a man of paradoxes. He had simply decided that the arms race had to stop somewhere, and the stopping point ought to come before creation of a weapon as powerful as an H-bomb.

Associated Press Wirephoto

*Clarifies the complex*

(Dr. Bethe with medal he received yesterday.)

### Methodical Manner

Dr. Bethe's failure to persuade the Government and many of his colleagues who opposed him on that question was a rare case of defeat for the scientist who, it has been said, lives like a man on rails. His methodical manner and steadiness of purpose in everything he does dazzle even other scientists, who are supposed to be pretty methodical and steadfast themselves. There are two stories about Dr. Bethe that illustrate this point.

One recalls the time when he, as a young man in Rome, was writing what turned out to be the standard work for many years in quantum mechanics. Dr. Bethe would emerge from the office where he wrote from time to time and ask the secretary for paper to write on. He used no books or scientific articles in his writing. When he had finished, the manuscript consisted of the same number of pages of paper as he had received from the secretary.

The other, perhaps more celebrated, story has to do with the work for which he first became known to the public—the concept of the system by which stars produce their energy, or what makes the sun shine. Dr. Bethe attended a meeting in Washington in 1938 at which some astronomers speculated over the kinds of reactions that might take place inside stars like the sun. On the way back to Ithaca by train he did some thinking of his own, and started calculating the energy that would be produced by various atomic interactions. He started at the bottom of the table of elements and moved upward one by one. In six weeks he came to carbon and knew at once that he had solved the problem with what has come to be known as the carbon-nitrogen cycle of stellar-energy evolution.

The soft-spoken, mild-mannered scientist joined the Cornell University faculty, where he is the John Wendell Anderson Professor of Physics, when he came to America from his native Germany twenty-five years ago.

One person who has heard Dr. Bethe speak on scientific subjects, slowly and so deliberately that there is scarcely a trace of his accent, remarked about his "nice way of explaining complicated things."

This "way" seems to have made a particular impression on his son, Henry George, who has just entered college with an avid interest in mathematics. However, Professor Bethe's daughter, Monica, unlike her father, is musically inclined and enjoys painting. She will finish high school soon.

Dr. Bethe, who was born in Strasbourg, Alsace-Lorraine, July 2, 1906, has little time for outside activities. But he does take an occasional flip through the pages of a stamp collection and sometimes a hike. The latter has long been his favorite pastime. He still spends a considerable amount of time in Washington or Boston on government matters o rindustrial consultation.

His wife, Rose, is the daughter of one of his professors in Germany.

Beatrice Stern research files, Vertical Files, Box 5, Articles
From the Shelby White and Leon Levy Archives Center, Institute for Advanced Study, Princeton, NJ, USA

# Princeton's 'Tiger' Reverts to Humor On Alumni Order

Special to The New York Times.

PRINCETON, N. J., Oct. 17—The undergraduate editor who intended to transform Princeton's eighty-year-old humor magazine, The Tiger, into a publication of serious articles and fiction has resigned.

With his resignation, the plans for the new Tiger have been set aside. The magazine will continue in its traditional role as a periodical of campus humor and cartoons.

Stephen Kroll, 20 years old, of London, Ont., said today he had resigned as chairman of The Tiger at the request of the magazine's board of trustees, sixteen Princeton alumni.

F. Le Moyne Page, president of the board of trustees, said: "We were saddened and surprised when we learned the old board felt they had the privilege or right to discontinue something of such long standing."

Mr. Kroll charged that he had announced the change in the magazine with the knowledge of Mr. Page, and that the trustees had expressed confidence in "the imagination and creativity of the undergraduates."

Mr. Page announced that Mr. Kroll's replacement was Henry McLaughlin, 21, of Halifax, Va., and that all eight men on the senior board had been replaced.

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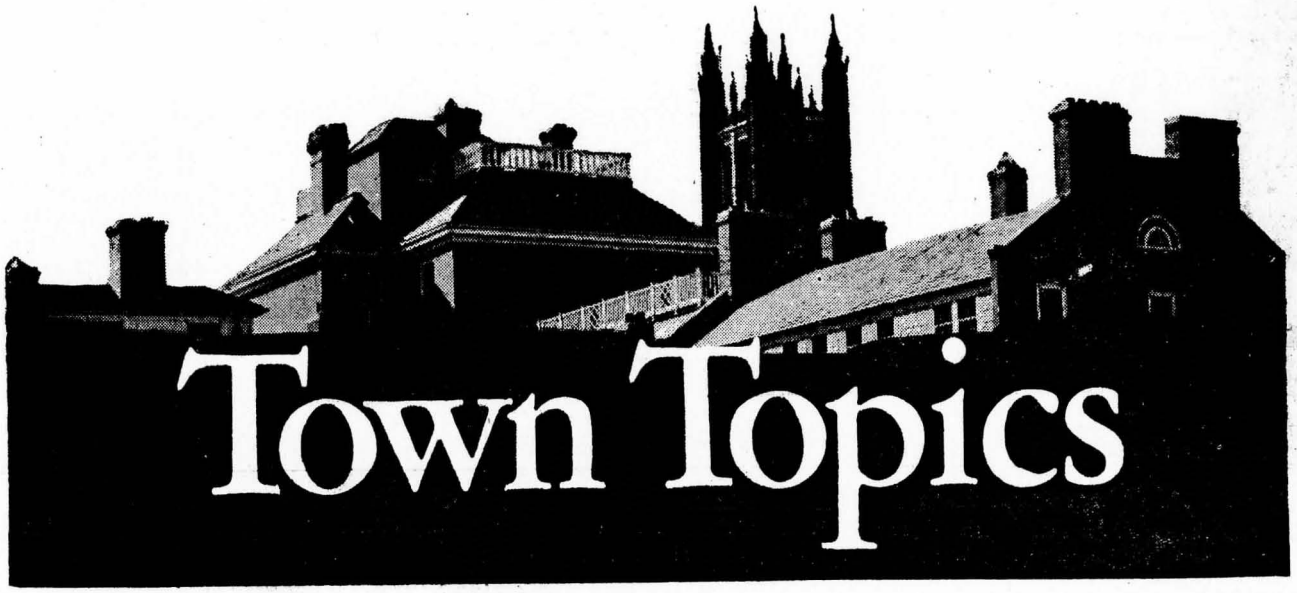
From the Shelby White and Leon Levy Archives Center, Institute for Advanced Study, Princeton, NJ, USA




## WE NOMINATE

Millard Meiss, possibly the most perceptive art historian yet produced in these United States and a Princetonian since 1958, who over the week-end became the first American ever to serve as president of the International Committee of Art History—the tightly-knit organization which made possible the past week's 20th International Congress of the History of Art. In a period when Americans and Russians alike are debating the advantages, and disadvantages, of fall-out shelters, the 57-year old Meiss went beyond the question of human survival in urging all nations to take the steps necessary to insure the preservation of their works of art in face of "the danger of destruction".

Speaking before the representatives of 21 countries, Meiss, a member of The Institute for Advanced Study for the past three years, suggested that each state has no time to lose in accelerating the completion of photographic archives for its masterpieces of art. It is his conviction, although scholars are not in complete agreement on the principles governing the conservation of art works, that any nation anywhere must regard the project as imperative so that at least "the shadow of its art treasures may be assured survival" and oncoming generations of students may have opportunities to re-construct what has gone before.

One of the few top-flighters in his field to have served a two-year apprenticeship in industry prior to entering upon his life's work, Meiss, Cincinnati-born and a member of the Princeton University Class of 1926, brings to his profession the tough-mindedness of a corporation executive. In his new post, he hopes to enlist the support of the United Nations Educational, Scientific and Cultural Organization in working toward an international exhibition devoted to the principles of conserving art and he won't hesitate to tap the knowledge of experts in exploring ways of making more effective use of photographic documentation and conservation.

Meiss, whose first contact with The Institute was as a Visiting Fellow in 1940, completed his graduate training at New York University and did his first teaching at NYU. He joined the Columbia Faculty in 1934 and over the next two decades developed a reputation, particularly for his pioneering work in the 14th and 15th centuries, that led one authority to describe Meiss' "connoisseurship" in Italian art as "the closest possible approximation to an exact science." The combination of his teaching, researches and writing led to his appointment in 1954 as Professor of Fine Arts at Harvard and also as Curator of Paintings in Harvard's prestigious Fogg Art Museum.

The recipient in 1953 of the Haskins Medal, the highest honor awarded by the Medieval Academy, Meiss played leading rolea in the editorial development of two of the country's major art periodicals, "The Art Bulletin" and "The Magazine of Art". An editor with the Office of War Information during World War II, the energetic Meiss, whose non-professional interests range from farming to music, was decorated by the Italian government for his efforts in restoring the art treasures of Italy following the collapse of the Nazi legions. For a period of five long post-war years he had been the highly effective chairman of the American Committee for the Restoration of Italian Monuments.

For raising the standards of American scholarship in an area traditionally dominated by Western Europeans; for symbolizing this community's growing and deep concern for all facets of men's knowledge; for meriting the distinction which has been conferred by his peers; he is TOWN TOPICS' nominee for

**PRINCETON'S MAN OF THE WEEK**

Beatrice Stern research files, Vertical Files, Box 5, Articles
From the Shelby White and Leon Levy Archives Center, Institute for Advanced Study, Princeton, NJ, USA

MONDAY, S

Sept. 11 1961

THE NEW YORK TIMES,

# PRINCETON PLANS UNIFIED STUDIES

## New Council Will Integrate Social Sciences—Project Believed to Be Unique

## $400,000 GRANT IS MADE

## Million More Will Be Given by Straus Fund if 10-Year Experiment Succeeds

Special to The New York Times.

PRINCETON, N. J., Sept. 10—A new approach to the problems of human relations, through integrated rather than specialized study of the social sciences, is to be tested here.

The Roger Williams Straus Memorial Foundation has made a ten-year, $400,000 grant to Princeton University for a pioneering project to combine the resources of all the social sciences. They will cooperate in the new Roger Williams Straus Council on Human Relations to seek fundamental principles in this field.

If deemed successful by the university and foundation at the end of ten years, the council will be permanently established with a grant of $1,000,000 more from the foundation.

### Disciplines to Cooperate

Dr. Robert F. Goheen, president of the university, and former Gov. Thomas E. Dewey of New York, chairman of the foundation, jointly announced the program today.

Dr. Goheen said the new council would bring together faculty members in history, politics, economics, sociology, anthropology and social psychology. All will be concerned with the study of human resources, human relations and human organization. A senior professor of social science, still to be chosen, will head the project.

Faculty members will hold seminars with the aid of visiting specialists. General principles in human relations will be tested in all fields of organized activity, public and private.

Dr. Goheen and Mr. Dewey described the program as an attempt to improve the quality of college education for potential business and government leaders by seeking insights into human relations problems.

Dean J. Douglas Brown of the Princeton faculty said he knew of no similar project.

### Urgency Stressed

In his announcement Dr. Goheen said:

"The tensions in human relations in the world today no longer permit the slow accumulation of bits and pieces of research in the various specialized branches of social science. The findings of social psychology must be put to work immediately in political science, and sociology must help enlighten economic analysis.

"In the past we have relied upon the trial-and-error experience of individual leaders to resolve human conflicts. We can no longer wait for such leaders to learn in the hard way the principles of human relations. We must put social science to work on a team basis to hammer out principles in organized behavior, just as science has hammered out principles in physics and biology.

"The new venture will face difficulties. Universities and their faculties have become increasingly caught up in specialization. But if they are to play their proper role in solving world-wide tensions, they must help organize and integrate specialized knowledge into generalized principles which are

Continued on Page 34, Column 4

# PRINCETON PLANS UNIFIED STUDIES

Continued from Page 29

relevant and useful in public and international policy."

Dean Brown said the council would run counter to "the normal competitive function of academia," which, he said, forgoes breadth for depth in learning.

He contrasted the function of the new council with that of Princeton's Woodrow Wilson School of Public and International Affairs, which received an anonymous grant of $35,000,000 last month to expand its program in the social sciences.

The Wilson School is "on horseback to meet immediate problems," he explained. "The new scheme will deal with cross-fertilization at the fundamental level long before immediate problems arise."

### Straus a Princeton Alumnus

Roger W. Straus died in 1957 at the age of 65, soon after his retirement as chairman of the American Smelting and Refining Company. At his death he was chancellor of the Board of Regents, New York State's highest policy-making and administrative body in the field of education.

Mr. Dewey described him at the time as "a creative liberal in business and education." Mr. Straus was graduated from Princeton in 1913.

Mrs. Straus established the foundation in memory of her husband. The former Gladys E. Guggenheim, Mrs. Straus is a member of the family that controlled American Smelting and Refining.

She is president of the foundation. Its treasurer is her son, Oscar S. Straus, a partner of Guggenheim Brothers, an investment concern with mining interests.

Besides Mr. Dewey, Mrs. Straus and Mr. Straus the following are members of the board:

Elliott V. Bell, chairman of the executive committee, Mc Graw-Hill Publishing Company, and editor and publisher of Business Week.

John F. Brosnan, chancellor of the New York State Board of Regents.

Dr. Everett Clinchy, executive president of World Tensions, an organization for world peace and brotherhood.

Dr. Arthur H. Compton, Nobel prize-winning physicist.

The Rev. George B. Ford, retired pastor of Corpus Christi Roman Catholic Church.

Devereux Joseph, director of the New York Life Insurance Company.

Arthur Hays Sulzberger, chairman of the board of The New York Times.

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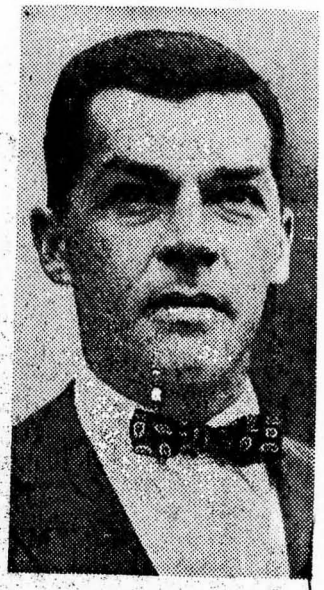
9-11-61
NYT

# Announce New Princeton Program

The New York Times

Thomas E. Dewey



Dr. Robert F. Goheen

# Excerpts From Papal Plea

*CASTEL GANDOLFO, Italy, Sept. 10 (Reuters)—Following are excerpts from the text of a speech appealing for peace made by Pope John XXIII here today, as issued in an English translation by the Vatican press office:*

Possessing the wisdom and the fullness of fatherhood as the humble successor of St. Peter and custodian of the deposit of faith—which remains always the great divine book open to all men of all nations—and consequently also the keeper of Christ's gospel, we deem it opportune to offer some personal concrete reflections on the present world situation insofar as it gives rise to uncertainty and fear.

Between two words, war or peace, are entwined the anguish and the hopes of the world, the anxieties and the joy of individual and social life.

He who cannot forget the history of the more or less distant past, years filled with afflictions and now recorded in old books, and still has a vivid recollection of the blood-stained half century between 1914 and the present, and remembers the suffering of our peoples and our lands—even if there were peaceful interludes between one tribulation and the next—trembles at the thought of what could happen to each one of us and to the whole world.

**War Brings Upheaval**

Every war bring upheaval and destruction to persons, regions and the entire world.

What could happen especially now with the frightful effects of new weapons of destruction and ruin which human ingenuity continues to multiply to everyone's loss.

In our youth we were always deeply moved by that ancient cry of despair which, when the army of Charlemagne first appeared on the Alps, Desiderius, the King of the Lombardos, gave out while rending his hair:

"The sword, alas, the sword."

What hould be said of the modern implements of war derived from the secrets of nature and capable of unleashing unheard of energy to wreak havoc and destruction?

**Threat Not Immediate**

By the mercy of God, we are persuaded that up until the present time there is no serious threat of either immediate or remote war.

In making this reference of our own to a subject that the press of all nations is discussing, we mean nothing more than to take still another opportunity of appealing with confidence to the serene and sure wisdom of all men who guide the nations of the world.

We make this appeal our own, extending it once more to those who bear on their conscience the gravest weight of public and acknowledged responsibilities.

The Church by her very nature cannot remain indifferent to human suffering, even were it no more than anxiety and anguish.

And this is the reason why we call upon the rulers of nations to face squarely the tremendous responsibilities they bear before the tribunal of history, and what is more befor the judgment seat of God, and we entreat them not to fall victims to false ad deceiving provocations.

It is truly upon wise men that the issue depends: that ofrce shall not prevail, but right, through free and sincere negotiations; that truth and justice shall be vindicated by safeguarding the essential liberties and the unsuppressible values of every nation and of every human person.

Though we are far from exaggerating the importance of what has, up to now, only the appearance—but we must say the too irresponsible and tragically deplorable appearance—of a threat of war, as reported in the sources of daily public information( it is quite natural that we should make our own the anxious solicitude of our predecessors and present it as a sacred warning to all our children, as we feel it our right and our duty to call them, to all who believe in God and in his Christ, and even to unbelievers since all men belong to God and to Christ by right of origin and of redemption.

**Prayer Is Urged**

Let us pray with one another and for one another, and for all the scattered creatures of God who make up the Holy Church and the human family, which is also all His own.

We would extend our most urgent invitation to prayer to priests, to consecrated souls, to the innocent and to the suffering.

Let us all together beg the Father of Light and of Grace to enlighten the minds and move the wills of those who hold the chief responsibility for the life or death of the peoples; let us pray for the peoples themselves that they may not allow themselves to be dazzled by exacerbated nationalism and destructive rivalry.

The world has no need of victorious wars and defeated peoples, but of the renewed strength of salvation and of the fruitfulnes and calm of peace.

This is its need and this it is for which it cries aloud: "Salutis exordium, et pacis incrementum"; "The dawn of salvation and the growth of peace."

Koufax, D
bT. Davis

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# EDUCATION

# MID-CAREER STUDY

## Many Now Returning to Campus For Academic Reinforcement

By FRED M. HECHINGER

When Princeton University announced last week that it had received an anonymous gift of $35,000,000 for the establishment of a professional school for Government service, it stressed that special provisions would be made for the advanced training of public servants "in mid-career." Some officials, who originally entered the Government as specialists or technicians, would thus be equipped for broad-gauged or policy-making positions.

The Princeton proposal highlights a problem to be tackled by American higher education: the advanced training of already highly educated professional manpower. In the past, this problem has been faced on a large scale mainly by two professions—teaching and the military. The sabbatical year allows for the mid-career educational advancement of educators; advanced academic study at civilian universities has long been prescribed (and has paid off in prestige and power) for upper-echelon professional soldiers who are to be converted from field officers to staff and policy experts.

In the future the mid-career return to the campus will figure prominently at American universities. The complexity and quick motion of modern society demands it. So much knowledge is being added so fast that even highly educated minds drop behind.

What are the signs of the mid-career education trend?

Confirming the public service need, underlined by Princeton, the State Department's own Foreign Service Institute has increased its advanced programs in the past three years. At the same time, it sends more career officers back to full-time university study. The emphasis is shifting from narrow specialist training to broad study of political science and economics.

Justus in The Minneapolis Star
"That reminds me . . ."

### The Seasoned Expert

The Graduate School of Public and International Affairs at the University of Pittsburgh and the School of Public Administration at Harvard are almost totally attuned to the education of the seasoned, experienced expert. Pittsburgh's Dean Donald C. Stone points out that in contrast to the many heavily subsidized advanced science programs, many of the mid-career public administration scholars finance their own training as an essential step to further professional progress. Among them are city managers, state and Federal officials and business executives. Last week Pittsburgh enrolled a 45-year-old high-level industry executive to permit him to shift his future activities to the under-developed countries.

Other special programs for experienced persons in similar need of a new career focus are offered by the University of Southern California, New York University and American University.

The School of Industrial and Labor Relations at Cornell reports among its present enrollment eight union officials engaged in a two-year study of international labor problems. Another ten students are executives in foreign subsidiaries of American concerns, such as Standard Oil of New Jersey. Several are high-level employes of domestic concerns, sent by their companies to add a pertinent master's degree to their education. The university's School of Agriculture at present is providing advanced training in food distribution to a grocery chain store executive.

### Needs in Medicine

Medicine is another profession in need of mid-career study far beyond the traditional refresher course. As the number of specialists increases, the number of physicians taking full-time advanced medical school work, after years of successful practice, rises in proportion. There are a few schools of post-graduate medicine—among them the New York School of Post-Graduate Medicine, the Mayo Clinic at the University of Minnesota and the University of Texas—which enroll mostly experienced practitioners. The United States Public Health Service has a vast and well-organized post-doctoral training program for its commissioned officers.

The need for mid-career training is felt most acutely in science and engineering. Dr. Thomas Stetson, head of civil engineering at the Carnegie Institute of Technology, said recently that unless the engineering graduate of ten years ago devotes 10 per cent of his time to develop his knowledge beyond the level of his collegiate training, he can no longer expect to compete with new graduates.

Falling in step with the trend, the National Science Foundation has started an important pilot project, under the Government Employees Training Act, permitting a selected few of their senior staff scientists to work on approved individual study of any kind on any university campus for a year at full salary.

### Aiding the Proven Craftsmen

There are other scattered examples of attempts to come to grips with mid-career education. For example, Radcliffe's new Institute for Independent Study, by offering a few highly educated women $10,000 annual stipends for one-to-five-year residencies "for large, long-range research or artistic programs" aims at another aspect of career-boosting. The well-established Nieman Fellowships offer a small, highly selected group of experienced newspaper men the "run of Harvard," without formal or degree requirements, to add breadth of vision to proven craftsmanship.

Universities so far have barely scratched the surface of the vital new mid-career education problem. Only a minority of employers include extended educational leaves in their budgets. Pressure of time and fear of seniority or promotion sacrifices are powerful obstacles. But most serious, [illegible] burgh's Dean Stone [illegible] is the scarcity of te[illegible] ficiently versatile [illegible] enced, seasoned bo[illegible] cally and in practi[illegible] oriented toward th[illegible] do the job, the univer[illegible] build new, open roads [illegible] change and feedback between the world of theory and action.

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THE NEW YORK TIMES, SUNDAY, JUNE 11, 1961.

# Scholars Completing Broad Plan To Improve the Social Studies

## College Experts Join With High School Teachers to Revise Objectives—New Stress on Sociology Is Expected

By FRED M. HECHINGER

Leading university scholars are completing the first nationwide attempt to improve the content and widen the scope of the social studies program in the country's schools.

The university experts, backed by the leading scholarly associations, are cooperating with the National Council for the Social Studies and selected high school teachers in a reappraisal that is expected to have far-reaching impact on the teaching of history, economics, geography and related studies.

The important academic move follows widespread complaints that the teaching of those subjects is largely obsolete and frequently inadequate and watered-down. The new approach will take greater cognizance of sociology, anthropology and the now generally neglected area of Asian and Rusian studies.

### Will Ignore Subdivisions

The experts agreed that they would not be concerned with such artificial subdivisions as elementary, junior high and high school but would try instead to determine only "what should have been accomplished by the end of high school."

The project is the result of meetings sponsored during the last three years by the American Council of Learned Societies and its Committee on the Secondary Schools. It adds the social studies to the growing list of subjects that are currently being restudied and revised, mathematics, biology, chemistry and English, but the social studies were seen as lagging as a result of lack of agreement among scholars.

Gordon B. Turner, executive associate of the A. C. L. S. and coordinator of the project, said the meetings, which included university scholars and school teachers, "convinced us that the basic problem of the social studies is one of formulating proper objectives, and that until this is achieved only patchwork solutions can result."

To reach agreement on curriculum objectives it was decided to ask one scholar from each of the disciplines and areas primarily concerned with the social studies to prepare a background paper. The Learned Societies commissioned the following subject-matter experts:

Political science: Dr. Norton Long, Northwestern University;

Sociology: Dr. Gresham Sykes, Dartmouth College;

History: Dr. Joseph R. Strayer, Princeton University;

Geography: Dr. Preston James, Syracuse University;

Anthropology: Dr. Douglas Oliver, Harvard University;

Russian Studies: Dr. Michael B. Petrovich, University of Wisconsin;

Asian Studies: Dr. Hyman Kublin, Brooklyn College; and

Economics: Dr. Ben W. Lewis, Oberlin College. Dr. Lewis is also associated with the general revision of economics teaching materials, currently sponsored by the American Economics Association and supported by the Committee for Economic Development.

### Master Plan Avoided

While the scholars are dealing with the content of social studies, the National Council for Social Studies has appointed a group to draft a single statement of objectives, without specific reference to content but reflecting the thinking and goals of the high schools.

Dr. Turner emphasized that no attempt would be made to "create a uniform master curriculum."

The aim is to provide guidelines for curriculum reform. One of the dangers to be averted, the scholars believe, is that of further fragmentation of knowledge as more schools draft plans for new courses.

The group feels that students should have an understanding of at least one non-Western culture, but that it should be up to the individual schools to determine whether this should be African, Asian, Latin American, Near-Eastern or Slavic. Thus, while the project will include Asian and Russian studies, these are considered merely as examples.

The scholars recognize that they must deal with attitudes as well as content.

They believe that "it would be preferable for students to bring to their first college courses in sociology a critical attitude toward society rather than one of complete acceptance."

Although it was clearly understood that "taboos" exist in some schools and regions on such matters as the concept of evolution, the Civil War and questions of "race," it was decided the authors would treat their presentations entirely as scholars. They are to be "free to recommend whatever they see fit."

### Will Propose Methods

The proposals will include scholarly methods, concepts and tools. No separate courses are to be mapped out for college-preparatory and "terminal" students. No effort would be made to recommend grade levels of study or course content for specific age groups. These questions are to be decided by the schools once it is understood what the general scope of the material to be covered ought to be.

The eight studies are expected to be ready for discussion by the Council for Social Studies in the fall. After critical review, it is hoped, they will be submitted to subject-matter teachers and school systems for use in curriculum reform.

Among specific questions to be answered are:

What is the proper relationship between social studies in the schools and social science in the colleges and universities?

How should the concept of "citizenship education" be incorporated in the social studies?

To what extent should the social studies curriculum deal with current issues as opposed to the basic historical, economic and political factors that gave rise to them?

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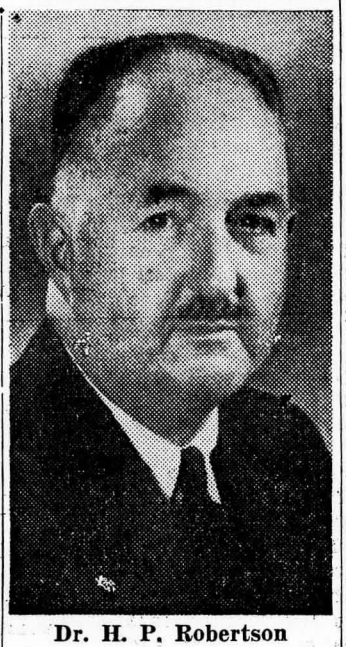
# Dr. H. P. Robertson Dies at 58; Science Adviser to the President

## Caltech Professor Did Broad Military Research—Planned Test of Einstein's Theory

PASADENA, Calif., Aug. 26 (AP)—Dr. Howard P. Robertson, scientific adviser to President Kennedy and Professor of Mathematical Physics at the California Institute of Technology, died today of injuries sustained in a traffic accident Aug. 10. Dr. Robertson, who was 58 years old, had been hospitalized with a fractured spine and internal injuries.

His home was at near-by Sierra Madre.

Surviving are his widow, a son and a daughter.



Dr. H. P. Robertson

### Broad-Ranging Researcher

Dr. Howard Percy Robertson was noted for research ranging from relativity theory and cosmology to scientific problems directly important to United States military agencies.

He was chairman of the Defense Science Board of the Office of the Secretary of Defense and a member of the President's Science Advisory Committee.

In 1958 he was named to a four-man committee of scientists established to propose a United States program for the international control of space exploration. He recently outlined a plan for using earth satellites to test Dr. Albert Einstein's General Theory of Relativity.

Dr. Robertson was born in Hoquiam, Wash., Jan. 27, 1903. He received B. S. and M. S. degrees from the University of Washington and his Ph. D. from the California Institute of Technology in 1925.

He studied in Germany for two years as a National Research Fellow at Goettingen and Munich and then joined the California Institute as assistant professor of mathematics.

From 1929 until after the close of World War II he was a member of the faculty of Princeton University. He returned to the California Institute in 1947.

While at Princeton in 1931, Dr. Robertson attracted wide attention by proclaiming that Dr. Einstein had gone too far in his theory of relativity. He said that he thought the truth lay somewhere between the positions held by Dr. Einstein, with his "cylindrical world," and the German mathematician W. de Sitter, with his "spherical world."

Between the two systems, Dr. Robertson said, he found the de Sitter theory more acceptable.

Problems related to the military occupied much of Dr. Robertson's professional attention during and since World War II. For his war service he received the United States Medal of Merit for "solving complex technical problems in the fields of bomb ballistics, penetrations and patterns and enemy secret weapons."

Dr. Robertson served with the National Defense Research Committee from 1940 to 1943 and as scientific liaison officer, London Mission, Office of Scientific Research and Development, from 1943 to 1946. From 1944 to 1947 he was an expert consultant to the Office of the Secretary of War.

In 1945 he was chief of the Scientific Intelligence Advisory Section of Supreme Headquarters Allied Expeditionary Force in France, and a scientific adviser to the United States military government in Germany.

### Adviser to Gruenther

From 1950 to 1952 he was on leave from the California Institute to serve as deputy director and research director of the Weapons Systems Evaluation Group of the Department of Defense. He served from 1954 to 1956 as scientific adviser to Gen. Alfred M. Gruenther when he was Supreme Allied Commander in Europe.

Dr. Robertson was a member of the National Academy of Sciences and had served as its foreign secretary since 1958. He was also a member of many other scientific groups in the fields of physics, mathematics and astronomy.

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THE NEW YORK TIMES, SUNDAY, JUNE 11, 1961.

# U. S. and European Lands Begin Test of a Key Economic Council

## Top-Level Group of Treasury and Bank Officials to Work Quietly at Stopping Trouble Before It Becomes Crisis

By EDWIN L. DALE Jr.

Special to The New York Times.

PARIS, June 5—A new experiment in international consulation and cooperation, aimed at improving the working of the world economy, has been quietly begun here.

It has produced no spectacular results. And its results in the future may go largely unnoticed, for its role is likely to prove largely "defensive" in heading off trouble before the trouble breaks. And it will always operate without publicity.

The experiment consists of a small committee of top-level treasury and central bank officials of all the leading financial nations of the Atlantic community. The group was established in April as the first act of the new Organization for Economic Cooperation and Development.

The committee has since met once and has agreed informally to meet about once a month. This means that two or three busy and important officials in Washington will fly to Paris regularly to talk with their counterparts in Europe.

At the first meeting, the small American delegation was headed by Robert V. Roosa, Treasury Under Secretary for Monetary Affairs, and Ralph A. Young, top career official and member of the Board of Governors of the Federal Reserve System.

The new group has three characteristics not possessed by any of the many other international institutions in the economic and financial field.

First, it is small. There are only nine members. But these nine include all the important financial centers of the Western world—the United States, Canada, Britain, France, Italy, West Germany and Switzerland.

They are full-time members and there is a form of "joint" representation for Belgium, the Netherlands and the three Scandinavian countries.

Second, it includes treasury as well as central bank officials. Thus it has an important characteristic not possessed by the European central bankers' "club" that meets monthly in Basel, Switzerland, under the auspices of the Bank for International Settlements.

Third, it includes the United States. Europe has found various ways of cooperation, often intimate, among top financial officials. But until now the United States had remained aloof.

The group is a reflection of the extraordinary financial "interlock" that now exists among the leading Western nations. Money flows from one to another almost as easily as it flows from New York to California.

Sometimes this flow can cause trouble, as was illustrated by the United States gold crisis last year.

If the new experiment works, these nations will tell each other what they are doing in such fields as the budget and interest rates and why they are doing it. They will hold nothing back. They will criticize each other freely.

The result is expected to be that nations will always have an eye to the interests and requirements of their neighbors when they take their financial decisions. This is not by any means new, but the practice and spirit of cooperation has gone through its ups and downs. The aim of the new group is to make cooperation instinctive and automatic.

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# UNITY IS PRESSED IN MATHEMATICS

## Educators of West Propose Adopting New Concept to Replace the Outmoded

## 200-YEAR LAG IS NOTED

## Prof. Fehr of Columbia Calls for Up-to-Date Teaching and Texts in U.S. Schools

By ROBERT H. TERTE

A panel of mathematicians and educators from eighteen countries called yesterday for a revolution in the teaching of mathematics.

Euclidean geometry is old hat after about 2,200 years, they said, and so is the laborious, 200-year-old method by which pupils progress from arithmetic to algebra to geometry to trigonometry to calculus.

Instead of this old method the educators would stress from the earliest grades the new concept of the unity of mathematics and an understanding of its structure, using techniques that have been developing since the turn of the century.

**Consensus of Specialists**

The 246-page panel report, made public here, was drafted by Prof. Howard F. Fehr, head of the Department of the Teaching of Mathematics at Teachers College, Columbia University.

The report, "New Thinking in School Mathematics," arose from a seminar on improving mathematics education held at Royaumont, France, late in 1959 under the sponsorship of the Organization for European Economic Cooperation.

Attending the seminar were mathematicians and teachers of mathematics for sixteen European countries, the United States and Canada. Their views reflected a growing movement to modernize the teaching of their subject.

In terms of modern mathematics, physics and science, they indicated, the mathematics now being taught to the elementary and high school pupils of most Western nations is a dead language.

**Old Ways Left to Museums**

"The new language of mathematics which is being spoken by mathematicians and scientists is applicable to the technological society we are constructing," Dr. Fehr said. "Many of these things which we loved should be taken down and put into museums for historians."

The electronic computer has outmoded the use of logarithms since the gyrocompass and radar have eliminated the need for the trigonometric solving of triangles for navigation and surveying, Dr. Fehr noted.

The new concepts must be taught in high school to prepare the students for the type of mathematics that they will find when they reach college, he said.

The retraining of mathematics teachers and the production of new books and materials are important steps in introducing the new program, Dr. Fehr went on.

The United States began intensive work in both areas in 1957, he said, but he noted that the Russians had been stressing science and mathematics since 1928 and had begun introducing modern concepts into the schools by 1950.

"If we could get a Berlin crisis in education so that Congress would act within a week to get something done, there wouldn't be any doubt in my mind that we could establish the new program here in the next ten years," Dr. Fehr declared.

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ON PACKET

ly Newspaper

, JULY 20, 1961 FIVE CENT THE PRINCE

Ambassador Kennan

# Nation's 'Mr. X' Now In Belgrade; Likes New Post

BELGRADE (AP) — "Mr. X," is back in diplomacy and is relishing every minute of it.

The Yugoslavs are flattered to have him in Belgrade, but wonder whether they should also be a bit wary.

So far the Yugoslavs and George Frost Kennan, the new U. S. ambassador to President Tito's Yugoslavia, are feeling each other out. But an interesting period lies ahead for the United States and Yugoslavia.

**No Ordinary Diplomat**

Mr. Kennan is no ordinary diplomat, and the Yugoslavs are aware of that. Belgrade is no ordinary diplomatic post, and Mr. Kennan knows it.

He is the man who advanced the idea that evolved into the U.S. policy of containment of communism. His proposal was outlined in a 1947 article simply signed "Mr. X" in the quarterly magazine Foreign Affairs.

Mr. Kennan was then chief of the State Department policy planning staff. The article was traced to him later.

During 27 years in the State Department, Mr. Kennan had frequently thought of leaving diplomacy and turning to writing and teaching. In 1953, after differences with the Eisenhower administra-

(Continued on Page 4)

# U. S. Diplomacy's 'Mr. X' Relishes Job In Belgrade

(Continued From Page 1)

tion, Mr. Kennan became a professor at Princeton's Institute for Advanced Study.

In 1957, he won a Pulitzer Prize for "Russia Leaves the War," dealing with the 1917-20 period in Russian history.

But Mr. Kennan was ready to return to diplomacy when the 1960 U. S. elections brought the Democrats into office. Early this year President John F. Kennedy announced his appointment to Belgrade.

**Back In "Thick"**

"I am happy to be back in the thick of things," he tells visitors. "I liked the academic life, but I became tired and stale writing in solitude. I missed diplomacy.'

Yugoslavia, following what it calls an independent road to communism, has irritated the Soviet Union by straying from the path marked out by the Kremlin. But the Yugoslavds also are critical of the United States, frequently denouncing the American government as imperialist and reactionary.

Friends of Mr. Kennan say he sees his job as a two-sided effort: to convince Yugoslavas that they be independent in foreign policy and still be fair to the United States, and to convince Americans that the Yugoslavs, even if Communist, are sincerely anti-Kremlin.

Mr. Kennan is said to feel Yugoslavia is a friend worth having, especially because of its ties with the uncommitted countries of Africa and Asia.

Beatrice Stern research files, Vertical Files, Box 5, Articles
From the Shelby White and Leon Levy Archives Center, Institute for Advanced Study, Princeton, NJ, USA

# Princeton May Feel Pinch In N. J.'s Research Drive

Princeton, which has found itself to be a magnet for attracting research and development firms, may find some of this attraction being actively competed for by some of its neighbors within New Jersey's borders.

Or, Princeton could end up as the nation's research center.

Either result is possible as this Fall a broad effort will be launched to make New Jersey the foremost State in the nation in research and development — a $16 billion a year industry.

This is the goal of a committee of scientists and industrial leaders who are organizing the N. J. Council for Research and Development. The drive will begin following election of officers and a board of directors in September.

Some 600 firms and organizations, including colleges and universities, are expected to unite behind the council in an effort to "create a favorable climate" for research and development in the State.

**State Aims**

The aim is to:

Facilitate expansion of research activities within the State.

Attract new industries spawned by technological advances.

"Upgrade" unemployed, unskilled workers so they can meet a demanding need for technicians to work under scientists and engineers.

Foster education right through the doctoral level.

**Young Ideas**

In listing its objectives, the committee organizing the council states:

"New Jersey is increasingly becoming a center for industries with young ideas — industries which spend heavily for research and development and concern themselves with the technology of tomorrow.

"This is borne out by the fact that over 10 percent of the nation's research and development personnel are housed in New Jersey and over 10 percent of the nation's research dollars are spent in New Jersey."

**Future Is Research**

Noting that the future of the State will be determined in large measure by the type, extent and implementation of research promoted within its borders, the statement continues:

"We are in a new era. More than half of all research spending to date in this nation's history has been spent since 1950.

"The impact of much of that spending is yet to come. The rate of research spending is rising steadily. If New Jersey is to reap the full benefit that the future holds in store, then it must maintain a favorable climate for research and development within its borders.'

**Need Faster Rate**

The concern is that research is not growing at as fast a rate as it might and that other states are seeking to forge ahead at New Jersey's expense.

While this is true, New Jersey is rated second only to California in the extent of research activities. Other leaders in the field are Massachusetts, Connecticut and Florida.

To meet the competition the council would:

Study and then make recommendations concerning the problems facing research in the State.

Establish techniques and methods to strengthen research in New Jersey, which in turn will attract new industry and thus create more jobs.

**Survey Manpower**

In studying the two courses of action, the council also would consider these actions:

—Conduct a survey of scientific manpower in New Jersey.

—Improve and make uniform the training of technicians.

—Explore and improve the education facilities for post-graduate work through the doctoral level.

—Utilize, develop and improve the skills of the work force.

—Create a research exchange center or a statewide technical information service.

—Report annually New Jersey's progress and scientific "breakthroughs" in research.

**To Evaluate Legislation**

The council would also evaluate the effect of both federal and State legislation affecting research.

For example, the State's personal property tax is rated a major barrier to the influx of new laboratories.

Phillip Kronowitt, chairman of the organization committee, notes that at least one major research organization gave up plans for a New Jersey installation because of this tax.

**Independent Organization**

Although the State Department of Conservation and Economic Development is assisting in the formation of the council, the latter is to be an independent organization with membership open to all engaged in research.

Among committee members are Col. Robert P. Haffa of Electronic Associates, Inc. in Long Branch, which also maintains a computer center on U. S. Route 1; Howard Onstott, Bell Telephone Laboratories, which maintains a research center, Western Electric, on Carter Road near Hopewell; Robert E. Weber, Systems Research Center for Lockheed Electronics, which is moving a research center to the Princeton area soon; and Raymond J. Woodrow, director of research administration at Princeton University.

Representing the conservation department are B. Budd Chavoshian of the State Planning Bureau, and Roland Stephenson, special assistant to the commissioner.

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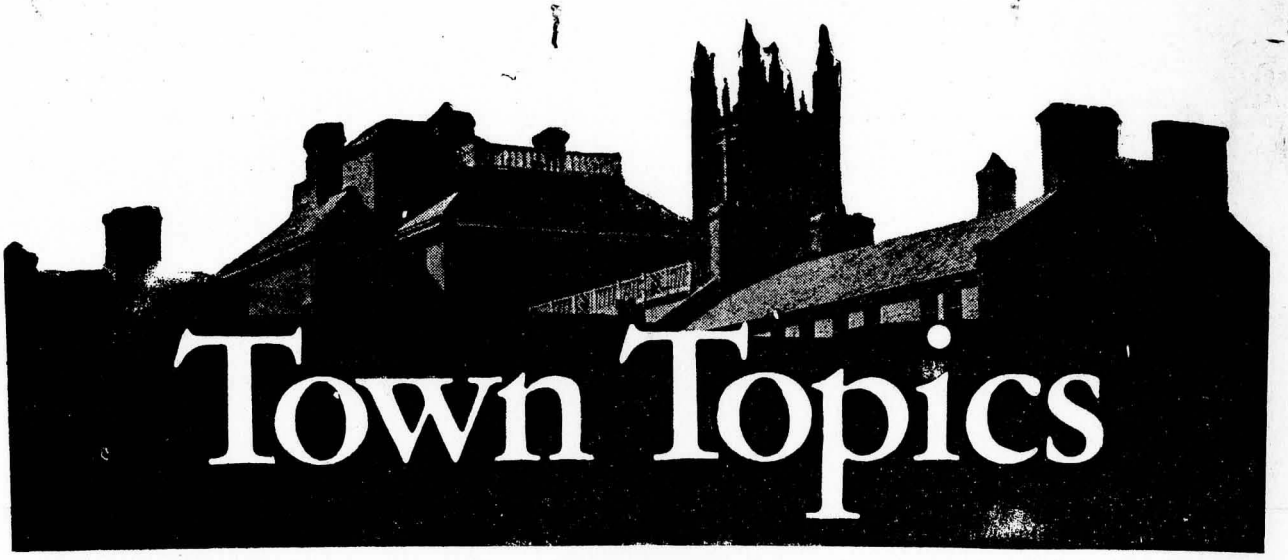
From the Shelby White and Leon Levy Archives Center, Institute for Advanced Study, Princeton, NJ, USA




## WE NOMINATE

Six eminent Princetonians, all in their late 60's and each a specialist in an area of learning who next month — with the conclusion of Princeton University's 215th year — will be retiring from the University upon completing a cumulative total of 181 years of active duty. Joining the ranks of professors emeriti, effective June 30th, will be Maurice Edgar Coindreau, Frederick Sherwood Dunn, Frank Ahern Heacock, Dana Gardner Munro, Henry Lyttleton Savage and John Fairfield Sly whose contributions to the interrelated worlds of knowledge and affairs range from prize-winning volumes to distinguished service in government posts or as members of specially created study "task forces".

The French-born Coindreau, retiring after 38 years, is internationally recognized as a leading interpreter of the contemporary literature of this country, France and Spain. Credited by Jean-Paul Sartre several years ago with originating strong American influences in French literature, this 68-year old scholar was inducted into the French Legion of Honor in 1955 for his pioneering efforts in interpreting French culture to the United States and American culture to France. Since first introducing John Dos Passos and William Faulkner to the French reading public, he has translated dozens of American works, including novels by Ernest Hemingway, Truman Capote, John Steinbeck, Erskine Caldwell, William Goyen and Flannery O'Connor.

Sharing "seniority honors" with Coindreau are Heacock and Savage, both of whom joined the Princeton Faculty in 1923, the spring Lord Cecil and Andrew Mellon received Princeton honorary degrees. The former, chairman of the Department of Graphics and Engineering Drawing throughout his tenure, has been a licensed New Jersey engineer since 1931 and in World War II directed training programs for nearly 3,000 employees in vital war industries. Savage, long active in the First Presbyterian Church, has combined researches in 14th Century English Literature with supervising the maintenance of Princeton's historical records and documents, first as Archivist in the University Library and recently as "Keeper of Princetoniana." iana."

Where Sly, director of Princeton Surveys since 1935 and National Chairman of the Y.M.C.A.'s Youth Government Program for two decades, has won renown in the broad field of state and local government, Dunn has roamed the expanses of international law and diplomacy for 40 years. Formerly executive secretary of the Walter H. Page School at Johns Hopkins, and from 1935 until 1951 Professor of International Relations at Yale, Dunn was called to Princeton as Milbank Professor of International Law and Practice in 1951.

The son of a medievalist, a career diplomat in Latin America before he moved to Princeton in 1930, and for 19 years director of the Woodrow Wilson School of Public Affairs, Munro in 1959 was one of the six members of the committee appointed by President Eisenhower to consider current and long-range problems in the United States' increasingly tumultuous relations with Latin America. Over the years, through his assignments in a half-dozen different Latin American Countries, extensive travels and writings, Munro became one of the best-known North Americans in South America — and also one of the first scholars to sense the importance of promoting wider understanding of Inter-American relations in the United States.

For their achievements in their chosen areas of concentration; for representing a cross-section of the interests which have contributed so much to the ongoing development of Princeton; for looking to the years ahead with all of the enthusiasm traditionally associated with the "younger generation"; these are TOWN TOPICS' nominees for

**PRINCETON'S MEN OF THE WEEK**

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# PRINCETON RESEARCH COVERS 200 FIELDS

Special to The New York Times.

PRINCETON, N. J., July 15 —Research in at least 200 projects is under way at Princeton University, "an outer edge of the New Frontier," J. Douglas Brown, Dean of the Faculty, said today.

He said 1,000 persons, including 200 graduate students and 250 faculty members were engaged in research projects or conducting institutes to help secondary school teachers. Others are doing research off the campus and in twenty foreign countries he added.

"The university is at the outer edge of the New Frontier. Industry and government can exploit the frontier after its has been pushed back. The university must consequently keep ahead," he said.

In defining highly talented manpower as the "seed corn or essential scarcer factor" in the world, he said the summer institutes such as the annual programs here in secondary school mathematics and physics "permit seed corn to produce more seed corn."