

By the end of the period covered by this book, the intentions of the founders had been largely forgotten, and the *Concordiensis* editors found it necessary to scold the participants for drinking on what had been an alcohol-free day. The event was subsequently abandoned.

See also: CAMP UNION.

**McComber, Stewart A.** (d. Nov. 5, 1919). Director of Physical Education and Professor of Hygiene, 1906–18.

After graduating in 1896 from Brown University, where he starred in track, McComber remained for a year as a gymnasium instructor and then spent two years as director of physical education at Worcester Academy. Moving to the University School in Detroit, he served as director of physical training while earning an MD from the Detroit College of Medicine (1903).

CHARLES WALDRON '06, who had been a track athlete under McComber at the University School, praised him so highly to President Richmond that when the departure of Dr. Herbert L. Towne created a vacancy at Union in 1906, Richmond offered McComber the position of Director of Physical Education and Professor of Hygiene.

As soon as he arrived, he published an article in the *Concordiensis* urging greater stress on intramural sports and physical education, and less on varsity sports (see ATHLETICS), and throughout his tenure at Union he worked to inculcate high ideals of sportsmanship. He coached track (see TRACK AND FIELD) with considerable success and improved the physical facilities for athletics, having a large part in the design of ALUMNI GYMNASIUM, completed in 1914.

McComber left Union at the end of 1917/18 to do YMCA war work in France. He remained after the war to direct the training of French schoolmasters in American sports, but he died there of meningitis about a year later.

**Machine Shop.** A building known variously as the Machine Shop, the Heat Engines Laboratory, and the Mechanical Engineering Laboratory stood from 1947 until 1985 behind the General Engineering Building on the edge of Jackson's Garden.

The one-storey building was among several moved from the Rome Air Force Base and erected on campus at government expense; it remained in use longer than any of the others. When it opened in the fall of 1947, the west end housed the Heat Engines Laboratory and the east end housed the College's machine shop, which served both the Mechanical Engineering Department (created in 1952) and the Maintenance Department. Other large mechanical engineering laboratory equipment, such as a dynamometer and a wind tunnel, were added later.

The building was twice enlarged: in 1954 a forty-foot by sixty-foot concrete block addition filled the space between the laboratory and the garden fence, and in the summer of 1957, a seventy-two-foot by twelve-foot extension was added to the southeast side. By the late 1960s, the west end of the building contained an adjunct biology laboratory/office.

Much of the mechanical engineering equipment followed the department to the Science and Engineering Center in 1971. When the machine shop moved to the new ENGINEERING LABORATORY in 1985, the old building was razed to make way for the College Center.

**McAuley, Thomas** (April 21, 1778–May 11, 1862). Class of 1804. Professor at Union College, 1805–22. Founding president of the Union Theological Seminary.

Thomas McAuley was born in Ireland, probably in Coleraine. The date of his emigration to America is unknown; he later said he had been a frontier missionary as early as 1799, when he was twenty-one. After preparing for college under ROBERT PROUDFIT at Salem Academy, McAuley entered Union in the junior class in June 1802.

A year after graduating as Salutatorian in 1804, McAuley was appointed a tutor at Union; in 1806 he married Miss Mary Magoffin of New York City, and the College made him Professor of Latin. McAuley began lecturing on mathematics and natural philosophy in 1811; two years later the trustees relieved him of his Latin classes so that he could serve as Superintendent of Construction on North and South Colleges, and in 1814, when that responsibility had been discharged, he was given the title Professor of Mathematics and Natural Philosophy.

Like other members of the tiny faculty in old West College, McAuley was involved in the skirmishes with students, circa 1806–9, that resulted in the departure of Professor BENJAMIN ALLEN and ELIPHALET NOTT's assumption of full responsibility for student discipline. But although one member of the Class of 1810 recalled that McAuley had been the "object of a wanton and cruel persecution" by students, the professor seems to have been more successful than Allen at keeping his sense of proportion.

On the new campus, McAuley was the first occupant of the faculty residence at the north end of North College (the present Bronner House) and is said to have had a garden nearby, in some sense a precursor of Jackson's Garden. On a visit to Ireland in 1816, he received an LLD degree from Trinity College, Dublin.

His daughter Catherine died in April 1818, aged eleven, and McAuley himself had apparently been seriously ill around that time; in July he gave the Board of Trustees three valuable mathematical instruments "as a small acknowledgment for the indulgence ex-

tended ... by your honourable Board while [I] was sinking under the influence of disease." He also gave to the College or sold it at bargain rates other instruments of his own manufacture.

It may also have been his illness and the death of his daughter that persuaded McAuley to return to the ecclesiastical life he had last pursued in his pre-college missionary days. In 1819 he was ordained by the Presbytery of Albany,

Always an emotional preacher—TAYLOR LEWIS '20 later remembered "the ever-fervid glow of his Irish eloquence"—McAuley became more so after a religious revival swept upstate New York in 1820. Abandoning at least temporarily "the orderly moral and doctrinal religionism of the old fashioned Scotch Presbyterians, with its conservative methods," Lewis recalled, McAuley "was carried away by the excitement of the time, and immediately fell in with the more alarming style of exhortation for which the New England revivalist [Asahel Nettleton] was distinguished."

Professor Proudfit, no profound scholar himself, thought his former pupil and colleague "a ready and somewhat showy man but not accurate." But it was probably some direct opposition to Nott's policies that led to McAuley's departure. Much later JONATHAN PEARSON, presumably relying on oral tradition, cited McAuley among the evidences for his belief that every faculty member who had opposed Nott had been forced out.

McAuley left Union in 1822 to become pastor of the Rutgers Church in New York City. A committee of students called upon him with a formal expression of regret at his departure, and the College gave him a DD degree.

After keeping his New York church in a state of continual revival for seven years (declining election as president of Transylvania University in Kentucky in 1826), he accepted a call to the Tenth Presbyterian Church of Philadelphia. Returning to New York City in 1833 as pastor of the Third Associate Reformed Church (later renamed the Eighth Street Church), he helped found the New York Theological Seminary (later, UNION THEOLOGICAL SEMINARY). In 1836 he was chosen as the seminary's first president, first board president and first professor, holding those positions concurrently with his pastorate. The only other full-time faculty member, Henry White, was an 1824 Union College graduate; Ichabod Spencer '22 was a director and adjunct professor.

Classes initially met in McAuley's home; after two years the seminary erected its own building, but the institution was plagued with debt, and McAuley stepped down as president and board president after four years. The new seminary president was made responsible for fund-raising.

When the Presbyterian church began in 1837 to split into "old school" and "new school" factions,

McAuley, unlike most Irish or Scottish-born Presbyterians, sided with the latter. In the ensuing turmoil, while he was "under judicial process," his church withdrew in 1845 from the Dutch Reformed denomination and connected itself with the Presbytery of New York. Later that year, aged sixty-seven, McAuley retired; he died seventeen years later.

**McIlwaine, Theodore Richard** (Aug. 15, 1908–Jan. 11, 1970). Class of 1930. Sigma Chi. Business Manager.

Born in Plattsburgh, New York, "Ted" McIlwaine followed his brother Joseph McIlwaine '26 to Union, majoring in mathematics and serving as managing editor of the *Concordiensis*. His college years saw the beginning of the Depression; when he graduated he was fortunate to find a job as an assistant traffic supervisor with A.T. & T.. After two years, he returned to Union to study civil engineering, earning a BS in that field in 1934.

McIlwaine then worked at a variety of short-term engineering and surveying jobs until July 1939, when he accepted the position of assistant to comptroller ANTHONY HOADLEY at Union College.

In April 1941 McIlwaine was called to active duty from the National Guard, spending fourteen months in the European theatre, during which he participated with the U.S. Army Corps of Engineers in the Rhineland campaign. Discharged in March 1946 with the rank of Lieutenant Colonel, he returned to his College position but continued to serve in the U.S. Army Reserve until 1962.

When Hoadley returned to teaching in 1949, the position of Comptroller was eliminated and its duties divided between the newly created offices of Bursar and Business Manager. McIlwaine was appointed to the latter post, in which he served until his death at sixty-one. In a 1964 reorganization, a comptroller was again appointed, to take overall responsibility for the internal financial management of the College; McIlwaine thereafter reported to the comptroller.

McIlwaine's routine responsibilities as business manager encompassed purchasing, the College bookstore, various campus financial matters, and what is now called "Campus Operations"—the maintenance of the campus and its buildings. He was also heavily involved in the major building projects during his tenure: West College, the Field House, Richmond House, Schaffer Library, Fox and Davidson Houses, Potter and Raymond Houses, and the Humanities and Social Sciences buildings.

A soft-spoken, pipe-smoking man who nearly always seemed calm, McIlwaine and his wife, the former Lillian C. Stone, whom he married in 1936, lived in the faculty residence at the north end of South College from 1953 until his death, and were full members of the College community.

The MCILWAINE MEMORIAL COURTYARD was dedicated in Theodore McIlwaine's memory in 1972.

**McIlwaine (Theodore R.) Memorial Courtyard.** The McIlwaine Memorial Courtyard on the north side of the Science and Engineering Center was designed by Roberts and Litynski and built with money given in memory of THEODORE R. MCILWAINE '30, long-time business manager of the College. It was dedicated November 2, 1972.

**McKean, Horace Grant** (Dec. 3, 1864–Jan. 9, 1927). Professor of Rhetoric and Public Speaking, 1905–26.

Born in Hammonton, New Jersey, the son of Edward Thomas McKean and Mary Louisa Grant McKean, Horace McKean attended the Rugby Academy in Philadelphia and then Colgate University, from which he graduated in 1889.

Following a year of study at the Crozer Theological Seminary, he was ordained a Baptist clergyman in 1890. He served as pastor of churches in Philadelphia and Arlington, New Jersey, 1890–95, but then turned to teaching. After four years as professor of English language and literature at the Pennsylvania Military Academy (1895–99), he became headmaster of the Colby Academy in New London, New Hampshire, 1899–1905.

McKean came to Union in 1905 as Assistant Professor of Public Speaking and Rhetoric, partially filling the gap created in 1903 when EDWARD EVERETT HALE JR. shifted from Professor of Rhetoric and Logic to Professor of English Literature.

McKean and his wife, the former Elizabeth Bergfells, whom he married in 1892, resided in the north faculty apartment of North College from the spring of 1907 until his retirement, frequently entertaining students there. They had no children.

Because all students were required to take public speaking, McKean (whose surname students transmuted into the nickname "Mickey Ann"), was more widely known than most faculty members. Though dignified in appearance and manner, he was a notably friendly man.

While still a clergyman, McKean published his only book, a short textbook on *Conwell's system of oratory* (1892). Throughout his years at Union, he coached the DEBATING teams, which won far more often than they lost. In much demand as a speaker, he also occasionally supplied pulpits in the Schenectady area. Before the First World War, and occasionally after it, the McKeans formed touring parties to visit European cities.

Following a heart attack in 1922, McKean experienced repeated cardiac problems, most dramatically when he had to be carried home after collapsing in chapel in the spring of 1926. Resigning later that year,

at sixty-two, he underwent an operation in the fall, but another heart attack early the next year proved fatal.

On retiring, McKean had asked the trustees for a plot of campus land on which to build a house which would pass eventually to the College. The board had not acted on his request at the time of his death, but Mrs. McKean then obtained permission to erect and occupy the structure now known as MCKEAN HOUSE.

Colgate awarded McKean a LittD in 1916, and Union honored him with a LHD degree on his retirement.

**McKean House.** The house at 17 Union Avenue, east of Wells House and west of the former BETA THETA PI fraternity house, was built in 1927 as a private house; it is now a college dormitory.

Retiring in 1926 and planning to vacate his apartment at the north end of North College, Professor HORACE MCKEAN asked the trustees for a Union Avenue lot on which he and his wife could build a house, with the understanding that it would become College property on their deaths. The Board took no action then, but following McKean's death the next January, his widow renewed the request, which was granted.

She lived there from the house's completion later in 1927 until her death January 4, 1944. For the next twenty-seven years the house served as a College-owned faculty residence, occupied by PETER WOLD (1944–45), VLADIMIR ROJANSKY (1945–55), Harold Way (1955–66) and Dean James Palmer (1966–71).

In 1971, the structure was renovated for a women's cooperative dormitory, opening in 1972 as McKean House. Since the fall of 1981, McKean House has been assigned to KAPPA ALPHA.

**McKim, Mead and White.** Founded in 1879, the New York City firm of McKim, Mead and White became America's most prestigious architects, especially in the design of monumental public and institutional buildings. Their best-known works included Madison Square Garden (1891), the Pierpont Morgan Library (1907), and Pennsylvania Station (1911). They also designed buildings for many colleges and universities, including Columbia University, New York University, the University of Virginia, Trinity College, the University of Nevada, and Union College.

In 1925 (by which time the founders had died or retired), Union's trustees asked McKim, Mead and White to prepare a plan for the College's future development; over the next forty-nine years, the firm and its successors—Steinman and Cain, and then Walker Cain Associates—designed all the College's major buildings and several lesser structures: MEMORIAL CHAPEL (1925); the BROWNELL GATE (1925); BAILEY HALL (1927); Ryder (STEINMETZ) HALL (1930); the Psi Upsilon flagpole (1933) (see FLAGPOLES); the new PSI UPSILON HOUSE (1938); BLUE GATE (1948); WEST

COLLEGE (1950); MEMORIAL FIELD HOUSE (1955); RICHMOND HOUSE (1960); SCHAFER LIBRARY (1961) and its 1974 addition; the HUMANITIES BUILDING and the SOCIAL SCIENCE BUILDING (1966); DAVIDSON HOUSE AND FOX HOUSE (1967); and the SCIENCE AND ENGINEERING CENTER (1971). The firm also made several plans never executed, including proposed modifications of the NOTT MEMORIAL and an elaborate development plan for the PASTURE.

In 1951, the College awarded an honorary Doctor of Fine Arts to senior partner Lawrence Grant White, who had designed Memorial Chapel, West College and the Field House (as well as Schenectady's City Hall). Walker O. Cain was given an honorary Doctor of Letters in 1971.

See also: ARCHITECTURE OF UNION COLLEGE.

**McMurray, Charles Backman** (Dec. 1, 1865–Jan. 25, 1940). Class of 1887. Businessman. Trustee, 1907–1940. Acting President, 1922–23.

Born in Lansingburgh, New York, the son of Alfred Warner McMurray, a successful manufacturer, and Augusta Eleanor Fake McMurray, Charles McMurray attended Troy Academy before enrolling at Union in the scientific course. He was class president, joined Delta Phi, and played varsity baseball and tennis.

After graduation, he entered the family brush manufacturing firm established by his great-grandfather; upon dissolution of the firm in 1899, he and his brother founded the C.F. McMurray Co. to manufacture pulleys and shaftings. From 1907 to 1913 he was a contractor working on the Erie Canal. McMurray eventually became a vice-president of the Troy Trust Co. and a director of two other banks; by 1923, he described his occupation as "banker."

In 1888 he married Eleanor Beattie, sister of ANNE O'NEILL BEATTIE.

First elected an alumnus trustee of the College in 1907, he was made a life trustee at the end of his second term in 1915. As chairman of the Buildings and Grounds Committee, he contributed his invaluable expertise as a contractor during the construction of the Carnegie Building, Alumni Gymnasium, Memorial Chapel, Butterfield Laboratory, Physics Laboratory, Bailey Hall and the Electrical Engineering Building. While President Richmond was on sabbatical leave, from June 1922 through March 1923, McMurray served as acting president of the College, commuting from Troy twice a week by trolley.

A longtime member of the Graduate Council, a governor of Union University, and a trustee of the Albany Medical College, he also served as trustee of the Emma Willard School and Russell Sage College, and was president (1921–30) of Troy's Leonard Hospital.

Union College awarded him an honorary Doctor of Humane Letters degree in 1929 and the Alumni

Medal for Distinguished Service in 1939. He established a scholarship in 1921.

**Mail, College.** Nothing is known about mail-handling during the College's first two decades on the present campus. James Sexton held the position "Postmaster and Assistant Registrar" in 1835/36; he was succeeded the following year by undergraduate Merwin Stewart '37. By 1835/36, James Rogers (see SUPPORT STAFF) was mail carrier, continuing in the position until at least 1859. The mail carrier at that time apparently did not deliver mail to the two dormitories; rather, his job was to fetch the mail from downtown Schenectady two or (by 1859) three times a day, as east and westbound trains passed through, and probably to take outgoing mail downtown. About 1837 or 1838 the registrar's/treasurer's office in South College added a room to serve as a post office. The post office remained in South College, under the management of a student, after the registrar's/treasurer's office moved to Geological Hall in 1856.

Until Congress made prepayment of letter mail mandatory in 1856, postage charges for U.S. mail were usually paid by the recipient; the College laws required students to remit these charges immediately "as neither the College Post-Master nor letter carrier is allowed to trust."

Students could rent boxes, but in the late 1840s, and perhaps at other times, the post office displayed on a bulletin board a list of persons for whom mail had been received.

Sometime after 1859, mail ceased to be brought to the College, and students had to walk to the downtown post office, a mile away. In 1870 the trustees authorized the treasurer to employ a student to carry and fetch the mail from the post office, and in 1896, responding to a vote at a student meeting, the College successfully petitioned the postmaster general for delivery to the College. Delivery began March 1, 1896. A U.S. postal employee then delivered mail directly to offices, fraternities and the dormitory sections, each of which had one box. From 1926 until at least 1940, the College was served by "Uncle Billy" McClennan. In the summer of 1937, a campus post office, containing boxes for each dormitory student and for fraternity houses, was created on the ground floor of Old Gym Dormitory. At that time a student was first employed (with funds provided by the National Youth Administration, a New Deal agency) to carry campus mail between College offices; such communications had formerly been sent through the U.S. mail.

The campus post office was apparently very soon dismantled; by 1939 the College had returned to the previous system of delivery by the U.S. Post Office directly to communal boxes in the dormitories, etc., and a proposal to create a central mail room in Washburn

Hall was dropped for lack of interest. The College's internal campus mail system ceased to operate sometime between 1940 and 1944, probably when Union went on a war footing.

In 1946, campus mail delivery apparently resumed, and the College again established its own post office/mail room. A room in Washburn Hall proving much too small, it was replaced the next year by a three-room post office in Old Gym Hall, with six hundred combination lock boxes. The mail room moved to the newly-opened West College in December 1950. After Fox House and Davidson House opened in 1967, they were served by a separate mail room in the latter building.

A mail room for the whole campus was created in the Student Center in 1975, and the College returned to the practice of assigning boxes to all full-time undergraduate students, including those who lived off campus. The mail room has remained in that building (now the Reamer Campus Center) except for the period of reconstruction, 1985–88, when it was housed in the basement of Richmond House. The Central Mail Service assumed responsibility for campus mail in October 1981.

**Male, Charles Thomas** (March 8, 1889–Dec. 27, 1977). Class of 1913 (MCE 1914). Professor of Mathematics, 1919–54; Assistant Comptroller, 1936–39; Acting Comptroller, 1943–43; College Engineer, 1943–46.

Raised on the Niskayuna, New York, farm of his parents, the English-born Charles W. Male and the German-born Christina Roupp Male (both naturalized U.S. citizens), "Charlie" Male was exposed at home to several of the worlds in which he would make a mark. His father was also a blacksmith, the town tax collector, and a band leader. By the age of thirteen, Charlie was playing clarinet and the alto horn in the band.

While still in high school, he worked on the farm and as a clerk and messenger for the Schenectady Trust Co. (1906/7), and taught eight grades in a one-room Niskayuna schoolhouse (1908/9).

After he matriculated at Union College in 1909, aged twenty, his college career was filled with so many extra-curricular activities that it is hard to imagine when he found time to study. Certainly his membership in the Pyramid Club, the debating societies and teams and the musical organizations (band, choir, glee club, mandolin club, orchestra), his service as literary editor of the *Garnet* and secretary of the Christian Association, and his presidency of the Terrace Council, the Adelpic Society, the senior class, and the student body, all contributed to his selection as recipient of the first Bailey Cup. He was also a Commencement orator.

At eight o'clock on Commencement morning he married Mildred E. Schairer. She had been the organ-

ist, and he the Sunday school superintendent at the Niskayuna Reformed Church, with which they would be associated throughout their lives.

Following brief service as secretary to Connecticut's state highway commissioner, Charlie returned to Union (1913/14) to earn a master's degree in civil engineering (1914). During that period he also taught surveying at the College, though without faculty status. In 1914 he went to the Panama Canal as a sanitary inspector and topographic draftsman. On his return in 1916 he again taught briefly at the College (descriptive geometry and railroad surveying), worked for the New York State Health Department as a sanitary inspector on special investigations, and for the American Locomotive Co. in building construction, before enlisting in the Army on America's entry into the First World War in April 1917.

Advancing from Second to First Lieutenant, Engineers, and then to Captain in the Sanitary Corps, he spent seventeen months with the American Expeditionary Forces in France, Belgium and Germany, in charge of investigations of water supply for troops. While waiting to be shipped home from France in 1919, he attended some lectures at the Sorbonne.

Back in the U.S., he accepted an invitation to join the Union faculty in the fall of 1919 as an instructor in engineering mathematics. Among his goals in life was to raise his family, already well under way at this time, on a farm. He purchased a farm in Niskayuna along the Troy-Schenectady Road (Route 7), about seven miles from the Union College campus, and obtained President Richmond's consent to a teaching schedule that left his afternoons free for his other interests.

These included not only the farm but also politics (Charlie served two terms in the state Assembly, 1922–23, and chaired the Niskayuna Republican Committee for thirty-five years), an insurance and real estate business begun in association with his father (in 1932 he published a textbook, *Real estate fundamentals*, and he taught evening division courses at Union in real estate), the professional engineering and land surveying consultancy which evolved into the present C.T. Male Associates, and the College band.

The farm provided the setting for frequent social contact with the College faculty, as Halloween parties were held in the barns and corn roasts in the woods. During vacations and even free half days when the College was in session, Union students found employment on the farm and—especially in the case of engineering majors—in the engineering and surveying business with which the Male family shared the farmhouse. Besides earning some much-welcomed money, the students gained experience in real surveying and engineering projects.

Charlie is probably best remembered within the College as the director of the band, to which he was passionately dedicated. He had led the effort to found

it while still an undergraduate in 1911, and after joining the faculty he directed it until resigning in 1947; the era of the truly active Union College band began and ended with him. Surveying the erratic history of Union's musical groups, Dixon Ryan Fox wrote in his *Union College, an unfinished history*:

The one instrumental organization that won approval and at times real popularity was, of course, the band. Brought together in 1911 by Charles T. Male (1913) and continued under his care almost without interruption for more than thirty years, it boasts a history not often equaled by such organizations in small colleges, if at all. Eschewing all the gayety of circus uniforms, it has held itself a distinctly college group, studying much serious music in rehearsal which it has been too prudent to essay on the field or in its chapel assembly concerts; and yet it has displayed a working repertoire in its public performances that has won the respect of the College. The return of old players to make up a double-sized band for the annual Alumni Day has been a delightful phenomenon of Union College.

Students in his mathematics classes remember hearing from other students that "you either had to be good in math or be in the band!"

In 1936 Charlie Male became the Assistant Comptroller of the College, a change that dramatically reduced the flexibility of his schedule. He returned to full-time teaching in 1939, but when professor ANTHONY HOADLEY had to step down as Comptroller in 1942, Charlie was tapped as Acting Comptroller. During those war years the College was essentially an officer training institution and the comptroller's office had to deal with many new contract and supply problems.

The next year the job was divided in two, and Charlie was appointed "College Engineer in charge of buildings and maintenance"; among his accomplishments was construction in the garden behind Hale House of the temporary mess hall known as Hale House Annex. He resigned that position at the end of February 1946 to return to full-time teaching, but as the College adapted to a huge postwar influx of veterans, he lent a hand in coordinating the construction, 1946-48, of the VETERANS' HOUSING in the pasture and DUTCHMEN'S VILLAGE on Nott Street.

Although he retired in 1954 (receiving the Alumni Gold Medal), he lived for another twenty-three years, and never stopped making the rounds of reunion class dinners on Alumni Day and attending Commencement day functions. He saw the growth of his sideline consulting service into C.T. Male Associates (1950+), a highly regarded professional consulting engineering and surveying business which now has offices throughout the northeastern states.

He and his wife, Mildred, had two daughters (one of whom died in infancy) and five sons; all of the latter attended Union: Charles T. Jr. '36, William '38, Theodore '43, Donald '43, and Kenneth '45. Charles T. Male Jr. ("Tom") served as professor of civil engi-

neering at the College, 1942-92. Several cousins and members of subsequent generations have also graduated from Union, and the family has supported a scholarship Charlie established in 1949. Mildred died in 1960, and Charlie subsequently married Catherine Hill Jacobson, who survived him.

—Charles T. Male Jr.

**March, John Lewis** (March 11, 1873-Dec. 3, 1952). Professor of Modern Languages, 1899-1919; Professor of Psychology, 1919-43.

A native of Easton, Pennsylvania, where his father, a distinguished philologist, served on the faculty of Lafayette College, John Lewis March was one of nine children—the youngest of seven sons—of Francis Andrew March and Margaret Mildred Stone Conway March. His brother, Peyton C. March, became Army Chief of Staff during the First World War, and at one time five family members were listed in *Who's who in America*.

After graduating from Lafayette (AB 1893), where he had joined Delta Kappa Epsilon and won election to Phi Beta Kappa, March taught Latin for two years at the Hillman Academy in Wilkes-Barre, then spent three years studying in France, Germany, England, and Italy. In 1903, Lafayette awarded him a PhD.

He came to Union in 1899 as an instructor in French, but a developing interest in psychology led him to publish *A theory of mind* (1908), which he described as an attempt to broaden the field of psychology sufficiently to break down the barriers which separated psychology from biology. In 1917, his intellectual interests having moved entirely to psychology, he became the first person at Union to teach that subject separately from the formal study of philosophy.

In 1919 March was named Professor of Psychology, a change which must have caused some raised eyebrows among his more traditional faculty colleagues. At the time, President Richmond is said to have remarked, "I do not care what he teaches. It is enough to be in a classroom with him," and indeed it became accepted campus wisdom that everyone should, before graduation, take a course "in" Johnny March.

In March's time, students gave almost everyone on the College staff a nickname, from Pinky [Ellery] to Dummy [Taylor] and Bags [Stewart]. One senses that behind this kind of play often lay both affection and respect. Returning alumni made one of their first inquiries, "And how is Johnny?"

As a psychologist, March did not closely identify with any of the current schools, such as introspectionism or behaviorism; rather he taught a sort of eclectic and anecdotal subject matter, a combination of psychology and philosophy, much of it interwoven with examples taken from his own experience and his considerable erudition. He often drew on his interest in nature. In his senior course he found inspiration in the

work of European writers such as Fabre who were attempting to base the study of behavior on the observation of insects.

He published *A book of verse* in 1904, and from 1904 to 1906 he edited the *Union University Quarterly*. Although he reported in 1924 finishing the manuscript of a new book on psychology, it was never published.

A chain smoker who used a cigarette holder, he was a commanding figure with piercing eyes and an impressive Van Dyck beard (the College owns a portrait by Cornelia Cunningham Schoolcraft). Charles Waldron, who studied French with him about 1902, later recalled that he had learned more about the French people than about the language, and concluded that "it was the man and not the subject that counted":

There was nothing in our Johnny of that pleasant autobiographical sketchiness which sometimes accompanies the popular teacher. We recognized even as an undergraduate that his mind was subtle, his reasoning keen, and his opinions firmly settled. He was entertaining because he was witty, because he knew a great deal and he had the gift of making knowledge real to a younger mind; but there was a masculine quality and even a dominating character in his own mind that aroused respect even when you differed from him. He had the courage to think radically and speak out.

Roger W. Busha, who took March's freshman course in 1935, later recalled his "most peculiar manner of speech":

His speech was loud, slow and brief. He spoke as though each word [was one] he had never used before and thought on hearing it he would never use again.

When we were called to recite—which was by his attendance book, because he never really got to tell one of us from the other [—]...the [student's] answer was often detailed, long and rambling. Dr. March would interrupt with "No" and call the next name in his book.

A lifelong bachelor, he lived for many years with his sister near the campus. To Schenectadians he was a familiar figure as he sat at one of the downtown drug stores or restaurants every morning, doing crossword puzzles, and in a sense holding court.

At the death of E.E. Hale Jr. in 1933, March became the "senior professor" of the college, a sort of informal honor no longer recognized. He retired in 1943 after forty-four years of service, but returned to part-time teaching during the war years.

—C. William Huntley\*

**Martin, Harold Clark** (Jan. 12, 1917– ). Fourteenth president of Union College (July 1, 1965–June 30, 1974).

Born in the northern Pennsylvania hamlet of Raymond, the second son of the four children of Henry Floyd Martin and Anna May Clark Martin, Harold Martin moved in early childhood to Denton, New

York, where his father had a farm producing celery and onions. He emerged from high school in the depths of the Depression and with few expectations, but with a series of jobs he managed to work his way through Hartwick College, where he earned a BA in 1937.

He took a job teaching high school English in Adams, New York, devoting the summers to graduate courses in English Renaissance studies at the University of Michigan in Ann Arbor. In 1939 he married another Michigan student, Elma Hicks of Webster Springs, West Virginia, and returned to his high school in Goshen, New York, to teach English and then to serve as principal. The Martins would have four children.

Exempted from the draft because he was both a high school principal and a father, he enlisted in the Navy late in the Second World War and served for a year as an instructor in English at the Naval Academy Preparatory School in Bainbridge, Maryland. After his discharge he returned to Goshen while continuing to seek full certification through courses in education at Columbia and then at Harvard.

He enjoyed Harvard but found its education courses to be the same "dreadful stuff" he had encountered elsewhere, so he switched to the graduate school of arts and sciences and became a doctoral candidate in comparative literature.

Like many in his circumstance, he served as a graduate teaching fellow in English A, the much-imitated basic writing course required of virtually all first-year students at Harvard. When English A metamorphosed into the interdisciplinary General Education A, Martin became its director with an appointment as lecturer, a rank signifying duties more administrative than instructional. After completing his dissertation on concepts of nature in twentieth-century poetry, he received a PhD in 1954.

His contributions to the teaching of writing included two textbooks, *Logic and rhetoric of exposition* and, with Richard Ohmann, *Inquiry and expression* (1958), as well as a collection of essays, *Style in prose fiction* (1959). His visibility as the head of Harvard's writing program and the wide adoption of his texts made him a logical choice as chairman of the College Board's Commission on English, a position he held for five years, 1959–64.

According to trustee SAMUEL B. FORTENBAUGH '23, chairman of the committee that selected him, Martin first came to Union's attention through his letter supporting the candidacy of an aspirant to the seat being vacated by CARTER DAVIDSON. News of his election was delivered to the campus by the *Schenectady Gazette* and the *New York Times* on February 11, 1965.

Like Carter Davidson, Harold Martin had a commanding height, though at six feet four Martin had the edge in altitude. Both held degrees from Harvard.

Both had been English teachers. There the resemblance largely ended.

Over his more than three decades as a college president, Davidson cultivated an affable, avuncular image. The more reserved Martin, with his great height and aquiline gaze, seemed to many a more distant and even intimidating figure. He rendered written reports to faculty and trustees, as well as his speeches, in a style of mandarin elegance that reinforced the impression of a formidable and formal personality, though in private correspondence and familiar conversation he displayed a wit that belied his rather stern public image.

Martin arrived at Union in the midst of a faculty debate over proposals for a new general education plan. In 1963 the faculty had voted to replace the traditional 5-5 semester scheme with the newly-fashionable 4-1-4 system, but doubts about the value of the one-course January term soon led to a reconsideration. An ad hoc committee headed by the new dean of the faculty, Theodore D. Lockwood, then began drafting another proposal involving more sweeping changes.

The resulting plan discarded a rather conventional distribution system of general education and replaced it with new courses under the rubric "Comprehensive Education." Simultaneously, the College adopted a new academic calendar of three courses in each of three terms a year, with two courses each year devoted to "CompEd." Echoing Dixon Ryan Fox's old slogan of the "balanced college," the new curriculum required all students to take courses in both of the newly organized academic "centers"—Humanities & Social Sciences, and Sciences & Engineering.

The new calendar also made it possible over time to develop an array of options for foreign study, allowing many Union students to participate in an experience previously reserved to a handful chosen for formal exchanges each year. Martin strongly supported the foreign study option throughout his presidency (see *TERMS ABROAD*).

Faculty members in engineering departments, aware that the accrediting agencies in their field looked on curricular innovation with a reflexive skepticism, were perhaps the most hesitant, but in the end the proposals were accepted and became effective with the class entering in 1966.

Although this process had begun before his selection as president, Martin came down firmly on the side of change and, indeed, agreed to teach a CompEd course in conjunction with Dean Lockwood. He went further. At a faculty retreat in the Berkshires in September 1965, in specific recommendations presented to the first formal faculty meeting that October, and in an article in the fall issue of *Union College Symposium*, he urged the faculty to re-think Union's mission.

Martin argued that a number of converging trends, including the rapid rise to prominence of public insti-

tutions in the Northeast, imperiled all traditional undergraduate liberal arts colleges. The threat was especially serious to those, Union among them, in the looming shadow of the State University of New York.

At that first faculty meeting he listed assumptions he thought should guide the institution, of which the very first asserted that "to hold its own in competition with state-financed colleges...this college will have to distinguish its program from theirs both in quality and in kind." He reiterated that prognosis in virtually every subsequent attempt to look at the College's future.

The twenty-three theses he put before the faculty in October 1965 turned out to be perhaps the clearest outline of what he thought Union's distinctions should be. Freely conceding that the process would "require internal changes that may make life harder and more taxing for a time," he then outlined some specific suggestions about the future shape of the College.

The emphasis on undergraduate education would remain paramount, but to it would be added "careful development of day-time graduate study in some fields," initially only to the master's level. He warned that such sacred oxen as class size and schedules, standard four-year curricula, and departments fattening on service courses could be gored. He also suggested that proceeds of an impending fund campaign might enable reduction in teaching load, "not to diminish the emphasis on teaching here but to make possible greater coordination of scholarly study and research with teaching."

Already engaged in implementing the new curriculum, the faculty did not rush to take up his challenge.

A year later Martin again tried to provoke discussion by offering more radical proposals. For instance, he said, Union might return to its roots as the first collegiate establishment in the University of the State of New York by grafting itself onto the State University of New York. Or it could seek shelter under the canopy of ancient rival Columbia. Maybe a Cornell tolerant of diverse institutional forms would welcome a merger. Yet another possibility: "develop without delay graduate programs in as many fields as resources permit."

Faculty and trustee committees spent a year considering these and other ideas but came to no conclusion. With some asperity Martin tried again to rouse the trustees: "What I must emphasize—and what both you and the faculty may be reluctant to accept—is that the future holds but little promise for independent liberal arts colleges that do not develop distinctive kinds of programs."

Although the distinctively new institution he envisioned did not emerge, in due course some of his proposals took hold. Through sabbatical policy, tenure evaluations, and hiring decisions, Martin put new emphasis on scholarly activity as an integral requirement, incurring the displeasure of some older faculty mem-



bers who considered the new mode incompatible with the "teaching college" image Union had long sought to promote. The College appointed a dean of graduate studies and expanded its offerings at the master's level; although most were earned through evening study in Schenectady or in extension programs in Poughkeepsie and in Pittsfield, Massachusetts, the number of master's degrees awarded by Union doubled, then tripled, to a high of 223 in 1972. Built on Union's own Industrial Administration program and its connection with Albany Medical College through Union University, doctoral programs in operations research and in life sciences produced a trickle of degrees, among them in 1971 the first PhD awarded by Union in more than thirty years (see GRADUATE PROGRAMS).

Union lost several tenured faculty members to flagship units of SUNY but otherwise withstood the threat posed by the expanding public system. The baby boom, a shooting war in Vietnam, and the student draft deferment combined to keep both public and private colleges filled, removing a sense of urgency; other matters gradually edged the question of radical restructuring off the institutional agenda.

Of more immediate moment was the rise of student activism, which first reached Union in the relatively benign form of demands for the loosening of parietal rules still stuck in the *in loco parentis* mode. Other changes attempted to give independents the same social options as fraternity men.

Initiated by the faculty rather than the students, the most drastic proposal of all called for reconsideration of the policy which, since 1795, had restricted enrollment to men only.

Here, too, Martin's crystal ball misted over. In a 1965 interview with the *Schenectady Gazette* he commented, "If you ask me whether we will eventually take women, I'd say we probably would not." In 1968, in response to a vote of the Faculty Council, he appointed a committee to study the question. Martin kept his personal views to himself, but to ensure that the proposal would receive critical examination he deliberately appointed to the committee some whom he deemed to be tilted toward the negative. When the committee unanimously endorsed coeducation, the faculty voted in the affirmative without audible dissent, and the trustees nearly so. The first full-time women students entered in 1970.

A dozen or more of the other historically male colleges also became coeducational in 1970, placing Union on the crest of a wave. But to the public coeducation was a mere ripple in comparison with the tsunami of student revolt that overwhelmed the nation's campuses, including Union's grounds, following the expansion of the VIETNAM WAR into Cambodia and the subsequent killing of student demonstrators at Kent State University.

To the displeasure of some, especially on the Board of Trustees, Martin joined with thirty-four other college presidents in signing a letter to President Richard Nixon urging attention to the student voices. After examining the errors made earlier at Berkeley, Columbia, Harvard, and other prominent venues, he also moved quickly to establish priorities for dealing with local disturbances: "first priority, human safety; second, institutions—by which I mean the law, college tradition and regulation, and so on; third, property."

To those who argued for the primacy of law over individuals, Martin had a simple, pragmatic response: "Generally speaking, if you set out to protect people from getting hurt or hurting each other, you stand a better chance of protecting institutions than if you work the other way around. . . . I put the protection of property third because property is replaceable and people are not, and because property can be more easily mended than institutions."

By a vote of confidence passed with one nay and one abstention, the trustees ratified Martin's policies, to which he held through the student strike of spring 1970 and through more difficult occupations of the computer center and the administration building a year later. He maintained his poise even when two faculty members scuffled over a Vietcong flag during the 1971 Commencement. Largely because of Martin's strategy of firmness mixed with understanding, Union weathered all these storms without the kinds of violent confrontations that marked similar episodes at Cornell and elsewhere.

As the Vietnam War wound down and activism diminished, other problems moved up the agenda, among them the question of TENURE. In the years immediately after the Second World War and into the 1960s, young faculty members could expect an all but automatic grant of tenure at the end of the normal six-year probationary period. By 1970, however, demographics made it clear that the bonanza years for higher education would soon pass, and with them would go the era of exponential growth and the faculty mobility it promoted. Adding scholarly activity to the evaluation criteria, decried by some as an inappropriate "publish or perish" policy, slowed but did not stem the flow into tenured ranks. By one calculation, in 1980 more than eighty percent of the Union faculty would have permanent appointments if grants of tenure continued at then-current rates.

Fearful of finding themselves shackled to an aging but immobile teaching staff with attendant hardening of the curriculum and steadily rising salary burden, the Board of Trustees voted in 1970 to limit grants of tenure to a maximum of sixty percent of the faculty. Under the leadership of Acting Provost Willard F. Enteman, the administration responded with a proposal to grant renewable contracts to faculty members

judged to be "tenurable" were it not for the proportional limit. The board agreed.

Although other institutions faced the same problem, few followed Union's lead in abandoning the traditional guidelines set by the American Association of University Professors. But neither did the faculty members who accepted term contracts later find themselves cast adrift, as critics had predicted. Indeed, so far the contracts themselves have simply become a form of untenured job security—in effect, tenure without the label.

A somewhat milder controversy arose over (comparatively speaking) big-time athletics. Though unaccountably cast up west of the Hudson, Union for years had sought to position itself as a natural confrere of the New England small colleges, the so-called "Little Ivy" group; old rival Hamilton claimed much the same. In the late 1960s John Chandler, chaplain at Williams before he became president of Hamilton, took the lead in discussions of a more formal association. In 1969 Union dropped out of the Upstate-based Independent College Athletic Conference (ICAC) and the following year began play as one of the founding members of the New England Small-College Athletic Conference (NESCAC) alongside Amherst, Williams, Wesleyan, Bowdoin, Bates, Colby, Trinity, Middlebury, and Tufts.

Almost immediately, however, the new league became anathema to fans of Garnet athletics. The debate raged over a very firm league rule banning participation in extended post-season tournaments. Such play had rarely been an option for Union, but under Coaches Gary Walters and Bill Scanlon the men's basketball team assembled records of 18–3, 18–4, 16–7, and 20–4. The team surely would have been invited to participate in the National Collegiate Athletic Association's Division III tournament in some or all of those years, but Martin held firm. In his view the academic association implied by NESCAC membership had far more value than the transitory glory of tournament play. For the time being, Union remained in NESCAC.

Games, however, were not Union's most important problem; money was.

In significant degree the financial difficulties could be traced to general weakness in the development program. The College did not have a vigorous FUND-RAISING tradition, perhaps owing to the fact that during the time when most institutions acquired those skills Union depended instead on the financial acumen of Treasurer FRANK BAILEY '85 to preserve solvency without the need for aggressive solicitations. Although the trustees knew they could no longer rely on Bailey's management and personal benefactions, many of them devoted more energy to talking of the need for money than to raising it or giving it.

Late in the Davidson administration the trustees approved a list of capital needs totalling some \$30 million. The board designated \$12.5 million in urgent

projects as the goal for the first phase of a capital campaign, duly launched by Martin with modest fanfare in October 1966. By the accepted premises of contemporary fund-raising, the campaign was probably fated to fail. It opened with less than the customary nucleus raised through preliminary solicitation and with an unusually low commitment from the Board of Trustees. It failed to attract the very large gifts required for success.

The trustees and the administration bore responsibility for many of the problems. The George Brakeley Co., nominally consultants on the campaign, assumed instead a managerial role, establishing in New York an office viewed by the campus development staff as a rival power center. Returning operations to the campus did little to put the campaign right. Planned regional solicitations fell short of targets or never materialized. A canvass on campus stirred resentment because employees were tapped while many alumni escaped unsolicited. By the time the campaign limped across the finish line in 1971, it had raised \$8.5 million, and nothing more was heard of the projected later phases.

Rapid turnover in the development staff contributed to these difficulties. The personnel section of the president's annual report recorded the regular arrival and departure of the inexperienced, the able, the incompetent, and the bibulous, few remaining in place long enough to set the program on a useful course.

Although President Martin displayed little personal enthusiasm for the mendicant's role, he dutifully courted major donors, among them the eccentric Margaret Woodbury Strong of Rochester, New York, widow of Homer Strong '96. Largely through the president's efforts the College ultimately received \$900,000 in her will.

Despite the slow pace of fund-raising, building dedications regularly punctuated the Martin years. Added to the grounds during his term were Fox and Davidson Houses, the Humanities Building, and the Social Sciences Building, all begun under Davidson and completed in 1967; the Stephen Potter Materials Laboratory (1968); a new heating-chilling plant (1969); the Science-Engineering Center (1971); a major addition to Schaffer Library (1974); the Stanley G. Peschel Computer Center (1974); and lesser projects. During the same period, more than twenty major renovation projects touched nearly all the principal buildings on campus. Among the buildings of Ramée's design, North College and Philosophical Hall (the Arts Building) received significant makeovers. Carnegie Hall, superfluous as a classroom building after completion of the science-engineering complex, became the College Center.

Much of this construction was financed with money borrowed in anticipation of returns from the capital campaign, and when those funds failed to materialize the debt service became a burdensome entry in

the budget. Gifts to the annual fund also tailed off, in significant part because of alumni reactions to anti-war activity and other phenomena of the day. Operating costs continued to climb.

After years of revenues in excess of expenditures, the budget slipped into deficit in 1966/67, though by a very modest \$89,030. The expense of preparing for coeducation put further strain on resources, and by 1969/70 the College was a million dollars in the hole, with another \$485,270 added at year's end—and with \$13 million in buildings yet to be paid for.

Drastic cuts in many areas of operation, including deferment of maintenance, reductions in publications, and cuts in student aid, combined with increases in enrollment as the number of women grew, slowly brought the operating budget back to health and into the black by 1972/73. Reluctantly, the trustees used funds functioning as endowment to write off \$7.2 million of the accumulated \$14,588,718 in debt, with the remainder to be repaid on a schedule incorporated into the operating budget.

As he entered his ninth year as president, a term already above average for college presidents nationwide, the accumulated pressures of finance and fund-raising, with the prospect of more intensive exertions in both areas immediately ahead, persuaded Martin that the time had come. He announced in mid-1973 that he would resign at the end of 1973/74.

At the very end of his term Harold Martin had a hand in one more building project. For some time he had sought to interest a former chaplain, Rev. H. LAURENCE ACHILLES Sr., of Manchester, Vermont, in contributing to a new gymnasium. In early June 1974 Martin learned that Rev. Achilles wished instead to give Union College a facility suitable for curling, skating, and ice hockey.

No program existed for such a building, and because Rev. Achilles wished the gift to be given during Martin's term, there was no time to prepare one. After conferring with director of athletics Bruce Allison, Martin hastily sketched a plan which assumed a hockey program that would build on the existing club squad, advance to competition in NCAA Division III within a few years, and attract the modest following normal for Union teams. Rev. Achilles agreed, and the deal was done at a total price of \$1.5 million—a gift announced by Martin on June 30, 1974, his last day in office.

Harold Martin's time as president coincided with a period of transition in American society, in higher education, and at Union. The first student demonstrations at Berkeley occurred a few months before he took office. Midway in his incumbency, more violent disturbances rocked Columbia, Harvard, and Cornell, spreading outward to other campuses, including Union's. Student activism and the consequent tensions had subsided by the time he left office, but by then the demographic evidence augured an early end

to flush times in higher education. As Martin had previously suggested, some institutions would surely encounter serious financial problems in the more competitive market already taking shape.

Martin's first article in a Union College publication bore the portentous title, "American Colleges and the Winds of Change." That article and his more radical proposals signalled at the outset that Martin hoped to become an agent of change at an institution perhaps a shade too complacent, a bit too comfortable, a little too content to find present virtue in past glory. Given Union's relative stability, affluence, and solid reputation, some of his early proposals may have seemed to exaggerate the impending dangers. In the sounding the alarm, however, he sought to awaken institutional ambitions that would take the College beyond mere survival. He accepted the presidency of a school generally accorded a solid place among the very good undergraduate institutions. He hoped to lift it into the very much smaller coterie of colleges widely recognized as superior—indeed, as desirable alternatives to the great universities in terms of selectivity and academic excellence.

In the end, however, change of such magnitude did not occur. The movement of an academic reputation normally proceeds at glacial speed. To achieve more rapid rise in relative position requires some combination of favorable times, a willingness to dare, a high degree of consensus, and large amounts of money to go along with executive vision. Early in his presidency Martin sought to articulate the range of possibilities he saw for the College, but the turbulence of the times, the institutional inertia, and the persistent shortfalls in funding raised obstacles that could not be overcome.

Although Martin's most ambitious goals proved elusive, he left an institution very much altered from the one he found in 1965. Enrollment had risen from 1,300 men to just over 2,000 students, among them 600 women. The one or two black students typically enrolled in earlier classes had become twenty-five or thirty—still too few, in Martin's judgment, but nevertheless providing some relief from the prevailing homogeneity. Soon after taking office he quietly ended the geographical quotas through which Union had long limited Jewish admissions.

The pace of change created some tensions, particularly with older faculty members and some alumni, two groups conditioned to prefer the comfort of what has been to the risks of what they fear may come to be. Martin understood that many senior members of the community viewed the emerging College as a departure from, perhaps even a repudiation of the one they had helped to shape. He took care not to denigrate the institution they cherished. At the same time, however, he loosened their grip on institutional decision-making and brought in new leaders, sometimes deliberately hiring at higher ranks to achieve that purpose.

Though conservatives deplored it as “publish or perish” folly, scholarship received more emphasis in hiring and tenuring processes. Martin’s personal commitment to intellectual rigor is reflected in those younger teachers, some fifty of whom remained at Union, risen to be the elders of the tribe, at the end of the period covered by this book.

On leaving Union Martin became president of the American Academy in Rome, a position he resigned in 1976 in significant part because of the heavy fund-raising burden it entailed. After a year as Martha Bundy Scott Professor of English at Williams, he joined the faculty of Trinity College, where Theodore Lockwood, former dean of the faculty at Union, was president. Martin retired from Trinity as Charles A. Dana Professor of Humanities in 1982.

The Martins returned to their farm on the outskirts of Rensselaerville, New York, but visited the College only rarely. In retirement he completed two books of Episcopal history, *St. George’s Church: spanning three centuries* (1984) and *“Outlasting marble and brass”: the history of the Church Pension Fund* (1986). More recently, he edited the diary of Jonathan Pearson for publication and contributed three articles to the present volume.

In 1988 the Martins forsook the icy blasts of Upstate winters for the zephyrs of Corrales, New Mexico. Elma Hicks Martin died there February 26, 1995, and Harold Martin subsequently moved to Maine.

—Bernard R. Carman

**Mathematics Department.** Mathematics was taught at Union from its beginning, a part of the traditional curriculum American colleges adapted from European universities.

Union’s first mathematics professor, JOHN TAYLOR, came to Schenectady about 1793 from New Jersey, where he had been a member of the first faculty of Queens College (Rutgers) and an officer in the Revolutionary War. He was hired to take charge of the SCHENECTADY ACADEMY, but after the College’s chartering in 1795 he became Union’s first faculty member, also serving as acting president for a few months until John Blair Smith arrived. Taylor and Smith then divided the entire curriculum between them until the appointment in 1797 of a classics professor, whereupon Taylor was given the title Professor of Mathematics and Natural Philosophy.

In the College’s first curriculum, nearly all the mathematics courses were grouped in the third year, which was called, not the junior but the mathematics class. Aside from some Greek or French, students devoted that year exclusively to the study of “vulgar and decimal arithmetic and the extraction of roots, geometry, algebra, trigonometry, navigation, and mensuration.” Although much of this study had been moved to the sophomore year by 1802, all except geometry

(“Euclid”) was moved back by 1807. A one-term junior year course in “fluctions” (differential calculus) was added in 1815, but not until President ELIPHALET NOTT introduced Union’s first parallel curriculum in 1828, allowing students to choose between a classical and a scientific course, was any mathematics (differential and integral calculus) studied in the senior year.

When Taylor died in 1801 he had recently been joined by BENJAMIN ALLEN (1800–09). Subsequent mathematics instructors included the Swiss-born FERDINAND RUDOLPH HASSLER (1810/11), who left to become first superintendent of the U.S. Coast and Geodetic Survey, THOMAS MCAULEY ’04 (1811–22) who left to become a clergyman and later served as the first president of the Union Theological Seminary, Francis Wayland ’13 (1821–26), who left to become president of Brown University, ALONZO POTTER (1822–26), the future Episcopal bishop of Pennsylvania, and BENJAMIN JOSLIN ’21 (1827–37), who had earlier tutored at the College, 1822–24, and who later became a physician.

Throughout most of this period, the faculty had only one mathematics professor, who usually also taught physics. He was often assisted by a tutor.

ISAAC JACKSON ’26, Union’s principal mathematics professor for most of his fifty-one year tenure (1826–77), also shared in the teaching of physics. His textbooks on conic sections (1836) and trigonometry (1859) made him the first member of the mathematics faculty to publish in his field. Although he attempted no original contributions (America’s first graduate program in mathematics did not begin until the year of his death), he maintained a lifelong friendship with the noted physicist Joseph Henry, and his texts and notes are evidence of his energy and love of mathematics and the teaching of it.

WILLIAM MITCHELL GILLESPIE, who came to Union in 1845 to start the CIVIL ENGINEERING program, was the first of several prominent engineering professors at Union to stress the importance of mathematics in engineering; he bore the additional title Adjunct Professor of Mathematics. Gillespie purchased for the College the OLIVIER MODELS of geometric surfaces now displayed in the Science and Engineering Center.

Following Jackson’s death in 1877, ISAIAH B. PRICE ’72, a tutor since 1872 (with a few months out for graduate study in Edinburgh), succeeded to the professorship of mathematics. He published *Elements of trigonometry, plane and spherical* (1881), for use as a textbook at the College, and also taught physics. He was probably responsible for the elective course in “the calculus of quaternions” offered from 1880 to 1882. Although the *Concordiensis* doubtless exaggerated in claiming that Union and Johns Hopkins were the only American colleges to offer a course in quaternions, it is remarkable to find that subject, then on the frontiers of mathematical research, taught at a small college.

Price died prematurely in 1884. BENJAMIN RIPPON, who joined the faculty in 1886, taught mathematics before switching to history and becoming Dean of the College in 1894. It was a period of great austerity at Union, and after a short term by James L. Patterson (1894–97), THOMAS W. WRIGHT, professor of physics since 1885, was asked in 1897 to take responsibility for mathematics as well. The following year, assistant professor Edwin Winans '88, who had been teaching mathematics since 1889, was among the junior faculty dismissed in order to reduce the instructional budget.

As departments in the modern sense gradually emerged in the later nineteenth century, mathematics and physics were lumped in a single department, reflecting the fact that both had usually been taught by the same person. In 1899, the College divided the two fields and relieved Wright of responsibility for physics; he served as head of the mathematics department until retiring in 1905.

President Raymond's strategy of regaining Union's strength by building the electrical engineering program had important consequences for the mathematics department. The world famous CHARLES STEINMETZ, who headed the electrical engineering program from 1902 to 1913, had—and believed that people in his field required—a firm theoretical grounding in mathematics (he would publish an engineering mathematics textbook in 1911). Consequently the electrical engineering curriculum required increasing amounts of mathematics: 28 hours (of 198) in 1902; 36 (of 227) in 1912.

In 1906 a separate department of engineering mathematics was established under the control of civil engineering, staffed by three instructors, while the "Academic" mathematics department had only CHARLES F. F. GARIS (1903–47), who had succeeded Wright as department chairman. In 1910 Steinmetz and his deputy, Olin Ferguson, wrote to President Raymond arguing that the teaching of mathematics by engineering professors resulted in "insufficient preparation of the electrical engineering students in general mathematics" and urging that responsibility be returned to the mathematics department, staffed by men "who have made special preparation for the teaching of the subject, rather than for practicing engineering." Civil engineering head OLIN LANDRETH objected strongly, but the change was finally made in 1914, increasing the mathematics staff from two men to five.

The First World War hit the mathematics department hard for a couple of years, as nearly all the young faculty enlisted. ARTHUR DODD SNYDER and CHARLES THOMAS MALE returned to spend the balance of their careers at Union, both retiring in 1954. Sidney Rowland also returned but resigned in 1924 to chair the mathematics department at Ohio Wesleyan.

Garis became Dean of Students in 1919. The position was combined with that of Dean of Faculty in 1934, and Garis served in the combined post until retiring in 1947. He retained the chairmanship of the mathematics department until 1944.

DAVID SHERMAN MORSE joined the faculty in 1918 but left the next year to earn a PhD from Cornell (1923). Returning to Union in 1924 as the first faculty member with a doctorate in mathematics, he rose quickly to associate professor in 1926, and full professor in 1931. In 1952 he became the first Marie Louise Baker Professor of Mathematics.

Although Garis remained department chairman, it is reasonable to assume—and living recollection supports the assumption—that Morse became *de facto* head of the department as early as 1933. He was officially named chairman in 1944.

Because chairmen traditionally served until retirement, and because national economic conditions through much of this period made it difficult for faculty members to find other jobs, there was little to prevent chairmen whose personality inclined them in that direction from turning their departments into fiefdoms. Until he retired in 1958, Morse is said to have run the department with an iron fist, telling instructors how to teach their courses and even how to display the proofs of individual theorems. Moreover, having decided that teaching and research were essentially antagonistic activities, he developed and maintained an atmosphere in which professional growth took a distant second place to teaching. Heavy teaching loads and low salaries made it difficult, especially for faculty members with families, to resist the temptation to teach graduate courses for extra compensation during the evening. It is not surprising, then, that published research was in short supply in the mathematics department during Morse's years in charge.

Despite Morse's influence, some research activity did occur. ORIN FARRELL, who joined the department in 1931 with a PhD from Harvard, published papers in 1932 and 1934, and in 1949, while on leave at the Institute for Advanced Study at Princeton, he read two papers at a spring meeting of the American Mathematical Society. But it is worth noting that Farrell only resumed his publishing career after Morse retired. Charles Standish (1954–57) also produced published work during his brief time at Union. The case of AUGUSTUS FOX, however, must appear on the debit side of Morse's record. Fox joined the department in 1929, and then, after a leave of absence, finished his PhD (1935) at Yale, where he was among the first doctoral students of Marshall H. Stone, one of the most prominent American mathematicians of the era, and so was at the forefront of what was then the new and exciting field of functional analysis. Fox, who retired in 1966, did publish three textbooks, but noth-

ing in functional analysis. It is difficult not to conclude that much of his promise was unfulfilled, and though the primary responsibility is his own, it is also clear that Morse did nothing to encourage him.

One of the most influential figures in the department's history, as controversial as he was dictatorial, Morse was no doubt well-intentioned, and may even have been unaware of the frustration and anger he aroused in his faculty. His influence continued well after his retirement in 1958. Fox served as chairman until retiring in 1966 (except for 1962, when Farrell was acting chairman), and William C. Stone '42 succeeded him. These three men had little or no experience with other leadership models. But the mathematical times had changed—there was now a shortage of PhDs, and a good part of the chairman's job was to recruit in an unfriendly market. Moreover, candidates for positions even at small colleges now wanted to sustain their research interests in addition to developing as teachers.

Perhaps not surprisingly, Fox, Farrell and Stone had their principal recruiting success with former students who had recently earned their doctorates. Three Union alumni, Stewart Robinson '55, Howard Bell '58 and Theodore Bick '58, were recruited back to the campus, Robinson in 1964 and Bell and Bick in 1966. They joined with Yel-Chiang Wu, who also arrived in 1966, in informal seminars. Inevitably, the talk turned from mathematics to a discussion of the department's future under Stone's leadership. A charming and decent man, very popular across the campus, and an acclaimed teacher, Stone saw himself—here again the Morse influence is clearly discernible—as “a teacher rather than a mathematician.”

These young men concluded that, in the existing climate, Stone's long absence from the professional mathematical world would make it impossible for him to do the necessary recruiting. At their request, he resigned the chair. The rebels received very bad press for what many faculty members inside and outside the department saw as an unnecessary humiliation. Bell, Robinson and Wu left the College in 1967.

The Morse era entirely over, a search for a new chairman conducted during the acting chairmanship of Dean James D. Palmer, yielded, in a stroke of good luck for the College, Arnold Seiken, who came to Union in 1967 from the University of Rhode Island. He had suffered there under the reign of an autocratic chairman and realized that, among his other duties, he had to heal the department's serious wounds. Stone was still in the department, as was his good friend Ingo Maddaus, himself an excellent teacher whose mathematical career had languished under Morse's chairmanship. Bick remained from the overthrow group. Seiken's recruiting strategy served the College well; he sought people who gave evidence of interest in both teaching and mathematical activity, but who

would also not subvert the delicate truce which kept the department together—there would be, if the new chairman could achieve it, harmony.

One of Seiken's early recruits, John Roulier (1969–73), personified this philosophy. An excellent teacher, he quickly established himself as the most active researcher in the history of the department up to that point, publishing one or two papers each year. But another early recruit, despite several warnings, elected to concentrate on teaching alone, at which he was quite good. He became very popular with his students, and when he was denied tenure (on the grounds of no publications and no program under way), several of the best students demanded an explanation. Seiken's performance in a meeting with them was masterful; displaying four calculus books, one from each of the preceding four decades, to dramatize the length of a tenure commitment, he pointed out that someone who had crystallized four decades earlier could have serious trouble being either an effective teacher or a successful researcher. The students, to their credit, were convinced.

In 1975, Seiken recruited two young set theorists, Alan Taylor and William Zwicker, whose mathematical ability and energy quickly became apparent. Immediately upon their arrival, they launched the biennial Union College Set Theory Conference. The only such conference at a small, essentially undergraduate college, it has continued to the present, with some name changes, bringing to the campus such international mathematical luminaries as Paul Erdős, Saunders MacLane, and Stanislaw Ulam.

After nine years as chairman, although the department was satisfied with his performance, Seiken relinquished the post in 1979 to William Fairchild (1970–) and at about that time it became College policy to rotate department chairs among the tenured faculty, usually for three-year terms.

Susan Neifield and Karl Zimmermann joined the department in 1981. In 1982, Bick followed Fairchild as chairman, while Julius Barbanell and Kimmo Rosenthal, who had previously served as temporary assistant professors, returned in tenure track positions. By this time, the critical mass of active young mathematicians and the existence of the conference had put Union on the mathematical map, with the result that the mathematical as well as the pedagogical expectations in the department had become very high, yet all six—Taylor, Zwicker, Neifield, Zimmermann, Barbanell and Rosenthal—made it through the tenure process. Taylor succeeded Bick as chairman in 1985. In 1987, Michael Frame brought to the department a high level of computer expertise and a driving energy which impressed even the dedicated group already in place; he was also instrumental in persuading the College to place a personal computer on the desk of everyone in the department.

Zwicker succeeded Taylor as chairman in 1989. At the end of the period covered by this book, the tenure track lineup in Mathematics was: Barbanel, Bick, Fairchild, Frame, Niefeld, Rosenthal, Seiken, Taylor, Zimmermann and Zwicker.

For the most part, curricular changes have kept up with or outpaced those of the competition. When the course in set theory and abstract systems (Mathematics 18) was created in 1967, it was probably the first "introduction to the upperclass curriculum" of its kind in the country, and by 1970 the department had in Bick and Fairfield the authors of perhaps the only two textbooks suitable for that course. The prerequisite for every theoretical upperclass course, it often serves as a primary indicator of success as a mathematics major.

The curriculum at the end of the period covered by this book allowed for three distinct majors: the regular major, designed with graduate study in mind; the applied major; and the major with an emphasis on computer science.

—Theodore A. Bick

**Mavor, James Watt** (Dec. 13, 1883–March 16, 1963). Professor of Biology, 1916–49.

James Mavor's family emigrated when he was ten from Glasgow to Canada, where his father taught in the political economy department at the University of Toronto. James took his undergraduate degree in mathematics at Trinity College, Cambridge (1905), and remained an extra year to take the natural sciences tripos. After a year of teaching at King's College (Nova Scotia), he earned an MA (1910) from Harvard, then taught for a year at Syracuse University. A traveling scholarship from Harvard enabled him to spend a year of study at the University of Munich (1911–12) before taking a PhD in Zoology from Harvard (1913). He taught for the next three years at the University of Wisconsin.

Mavor spent the summers from 1905 through 1915 at a variety of scientific research stations and on scientific expeditions, usually working on marine life. Continuing work begun in his doctoral dissertation, on fish parasites, he published several papers on parasitology, fisheries and hydrography, including a series of notes on ocean currents based on experiments with drift bottles.

Preferring to live in the East, Mavor left Wisconsin in 1916 to become the biologist in Union's combined department of biology and geology. In 1919 the department split and in 1921 a second biologist was added.

In 1920, General Electric Research Laboratory director Willis Rodney Whitney, who had learned from Thomas Hunt Morgan of the possibilities for inducing genetic mutations in fruit flies by x-rays, suggested to Mavor that he undertake such studies using GE's x-ray equipment. Mavor's pioneering experiments in 1920

and 1921 resulted in twenty papers published between 1921 and 1929.

Although he had certainly not exhausted this subject (University of Texas geneticist Hermann Joseph Müller, publishing in the same field a little later, won the Nobel Prize for his much more thorough and sophisticated work), Mavor, who had not been trained as a geneticist, considered his experiments finished, and he shifted his focus again. After five years of work, he published a highly successful textbook, *General biology* (1936), which went into six editions over the next thirty years. Some of the illustrations were drawn by his student, August Swyka '36. The reviewer in *Isis* called the textbook "among the best to be found in any language, and perhaps the most comprehensive." An abridgment, *A brief biology*, appeared in 1949.

Mavor became a naturalized citizen in 1924. He made national news in 1928 by warning in a *North American Review* article that perfection of methods of birth control could lead to the extinction of the human race.

Although he introduced Union's first course in microbiology (1921), Mavor was considered an exceptionally dull teacher; when he asked in 1945 to spend his last four years before retirement on leave of absence, President Fox and the trustees were happy to oblige him with the rank of research professor.

At 36, Mavor married Skidmore College physical education professor Dorothy Jessup in 1921; they had two sons. From 1932 until their departure in 1945 for Belmont, Massachusetts, the Mavors occupied WELLS HOUSE on the campus. Following Dorothy's death in 1958, Mavor married Anna C. Hoyt (1959).

**Maxcy, Jonathan** (Sept. 2, 1768–June 4, 1820). Third president of Union College, 1802–04; president of Rhode Island College and of South Carolina College.

Born September 2, 1768, in Attleborough, Massachusetts, Jonathan Maxcy was the eldest of four sons of Levi and Ruth Newell Maxcy, and the grandson of Josiah Maxcy, a member of the Massachusetts colonial legislature. On account of his early promise, the boy was sent to Wrentham Academy and then, at fifteen, to nearby Rhode Island College (later renamed Brown University). His younger brother Virgil followed him and became a noted legal scholar and diplomat.

On graduating in 1787 with highest honors, Jonathan, who delivered a Commencement poem "On the Prospects of America," was appointed a tutor at the college. Following a religious conversion, he was baptized by the Rev. James Manning, who was both president of the college and pastor of the First Baptist Church of Providence. The church licensed Maxcy to preach on April 1, 1790, and in September 1791, after Manning's death, ordained Maxcy as its pastor. At that time, aged twenty-three and recently married to Susan

Hopkins, a Providence native whose father had been Commander in Chief of the Continental Navy, Maxcy was elected a trustee and appointed the college's first professor of divinity.

His rapid ascension, unusual even for those times, continued. To replace Manning as president, the trustees put other people temporarily in charge for a little over a year, then appointed Maxcy as president *pro tempore* of the college in September 1792, whereupon he resigned his pastorate. Though he would be regarded as one of the most eloquent preachers of his age, he never again held a pulpit.

Maxcy received a full appointment as the second president of the College of Rhode Island on September 7, 1797. His administration was reasonably successful, but several factors made his situation difficult: he was very young—twenty-four when first appointed—and small of stature, although contemporaries remarked on his dignified bearing. Moreover, his religious stance made enemies. In 1795, while noting that his salary was less than that of a tutor at Harvard, he complained to a correspondent: "Many hard as well as false things have been said about me to injure my reputation.... A few bigotted folks who were unwilling I should be here at first, have been trying to tread me under their feet, & are determined to do it if they can."

The "bigotted folks" doubtless objected to Maxcy's liberalism in religion. In his graduation poem, he had envisioned the future American college as free from religious strife:

There shall religion pure from heav'n descend,  
Her influence mild thro' all degrees extend;  
Each different sect shall then consenting join,  
Walk in her domes, and bend before her shrine

Then, in 1796, republishing his funeral sermon on Manning, he made it clear that tolerance need not await a utopian future:

All men have full liberty of opinion, and ought to enjoy it without subjecting themselves to the imputation of heresy. For my own part, I can safely say, that I have never been disposed to confine myself to the peculiar tenets of any sect of religionists whatever.... An entire coincidence in sentiment, even in important doctrines, is by no means essential to christian society, or the attainment of eternal felicity. How many are there who appear to have been subjects of regeneration, who have scarcely an entire, comprehensive view of one doctrine in the Bible? Will the gates of Paradise be barred against these, because they did not possess the penetrating sagacity of an Edwards, or Hopkins? Or shall these great theological champions engross heaven, and shout hallelujahs from its walls, while a Priestly [sic], a Price, and a Winchester, merely for difference in opinion, though pre-eminent in virtue, must sink into the regions of darkness and pain?"

These sentiments, and especially the friendly reference to Joseph Priestley, although they did not block Maxcy's appointment in the state founded by Roger Williams, antagonized the most orthodox element.

By 1800 his college was thriving, with an enrollment of about 110, and Maxcy's salary had risen to \$1,000, plus Commencement fees and the use of a house and land. The following year, Harvard awarded him an honorary Doctor of Sacred Theology degree. Even so, whether because he was dissatisfied with his situation or his salary, when Union College, seeking to replace the recently deceased Jonathan Edwards, invited him to its presidency in 1802, Maxcy told his trustees "Nothing but necessity induces me to adopt this measure."

Union offered \$1,500 plus fees and a house. Maxcy's candidacy was championed by trustee ELIPHALET NOTT (whose master's degree from Rhode Island College was awarded during Maxcy's tenure) and opposed by DIRCK ROMEYN. A rare glimpse of the religious politics involved in the early selection of presidents at Union is found in a draft of a letter from Romeyn to fellow trustee John Johnson, who had been absent from the meeting at which Maxcy was elected:

[Maxcy's proponents] declared that Maxcy was a Christian, that he held the doctrine of Attonement, and the other doctrines of the Bible belonging to Orthodoxy, and tho he differed in modes of Faith yet it ought to be noticed that Gentlemen did not send Youth to Colledge to learn Religion [interlinear: "This is the language of a Gibbon"] but Languages and the Arts, that he was but 19 years old when he published his first exceptionable discourse, and therefore he could not be 30 years old, tho an Abeel was too young at 33 or 34 years old. That by the choice of Maxcy we would exhibit a proof to the Episcopalians that it was not our design to appropriate the government of College exclusively to certain Modes of Faith or the Presbyterian influence, and that by such a proof this denomination would be induced more readily to send their youth to this College than otherwise. That Maxcy had been held up as a Candidate for the Presidency of Columbia, but that the consideration of that Colledge being Episcopalian induced the Trustees to lay this man aside and choose Wharton.

Romeyn's preferred candidate was fellow Dutch Reformed clergyman William Linn, who had previously declined the position following the resignation of John Blair Smith in 1799. Although it had been assumed, before the College was chartered, that its president would be a member of the Dutch Reformed Church, the first two had been Presbyterians, and the board was now, to Romeyn's frustration, about to select a Baptist.

Accepting the offer on November 25, 1801 (though he would not take office until after September 1802), Maxcy averred that completion of Stone College was crucial:

When this is done a new era will take place in the College, & that will be the time to establish a new system of laws. The present state of the College does not admit of a good system of education. Unless the students live in a college Edifice, they will never be under that discipline, which is necessary for literary improvement, & for exhibiting the college to advantage.



Work on the building lagged, however, and in 1802 its completion was anticipated by a new and stricter set of residential regulations, with a complex system of vigilant proctors, fines and faculty courts borrowed in large part from the 1793 laws of Rhode Island College. At Union, as they had at Rhode Island, the rules tended to incite rebellion. Although Maxcy's personal approach to discipline, similar to Eliphalet Nott's, appears to have been a humane one, Maxcy did not take Nott's crucial extra step of assuming complete control of the process, and so had to deal with the consequences of divided authority.

As a teacher, Maxcy was especially interested at Union, as he had been at Rhode Island College, in teaching writing and public speaking; with his encouragement, students formed an association which met each day at sunset to practice extemporaneous speaking. The 1802 laws of the College introduced the requirement, presumably initiated by Maxcy, that "Sophomores, Juniors and Seniors shall exhibit compositions of their own in the English language, every Saturday morning."

Stone College was finally completed sometime in 1804, but at the July Trustees' meeting that year, after less than two years in office, Maxcy submitted his resignation, citing the baleful effect of the upstate New York climate on his health. The fact that he had been invited to become the first president of South Carolina College (the future University of South Carolina) at a salary of \$2,500, plus a house, must have made the decision easier for him, but even in a warmer climate his health remained delicate.

Maxcy's fifteen years at South Carolina College present some interesting comparisons to Union's early history. Again trustees were divided in his selection, but opposition this time derived less from religious concerns than from the fact that he was a Federalist and an outsider. While his successor at Union, Eliphalet Nott, was making a sharp break from Maxcy's administration in matters of curriculum, Maxcy was taking a somewhat similar course in South Carolina. By 1810, he had limited the study of Latin and Greek to the first two years and substituted an increased emphasis on science; though he had been Professor of Divinity at Rhode Island College, he took no initiative to have theology taught at South Carolina. His administration erected seven buildings and at first required faculty members to live in the dormitories, as they did at Union, and to board in commons, but those unpopular arrangements were soon abandoned.

Student discipline problems plagued Maxcy through much of his administration at South Carolina College; he tried to answer rowdiness with reasonable speeches, and addressed the students as "young gentlemen," but when he was driven to stronger measures the trustees often failed to support him. In 1814 the situation culminated in a riot, quelled only with

the assistance of the local militia. Relations between Maxcy, the trustees and the faculty also became very poor, and in 1815 the trustees considered firing him. Conditions improved, however, and Maxcy's last years were relatively tranquil; he died in office at fifty-one, following several years of poor health.

Maxcy read widely and systematically, but apparently wrote nothing for publication; his *Literary remains*, edited with a memoir by Romeo Elton in 1844, consists entirely of sermons and other public addresses.

At Union, the building now called FERO HOUSE bore the name Maxcy House from 1971 until 1990. Brown's Maxcy Hall, built in 1895, remains in use. The University of South Carolina erected a monument in his honor in 1827 and named a new building for him in 1937.

**Mechanical Engineering Department.** The present Mechanical Engineering Department was launched when thirty-nine freshmen enrolled in the program and began classes in September 1952, but the field itself has a much longer history at Union.

Students in the scientific course began spending part of one term on steam engines by 1868; in 1881 the topic grew to occupy two terms. Leaving aside the curious fact that, circa 1883, engineering drawing was termed "mechanical engineering" at Union and taught by Ira N. Hollis, "Professor of Mechanical Engineering," the first real appearance of the modern discipline came in 1903 with the introduction of a full course in electrical engineering, under Charles Steinmetz. Electrical engineering was very much concerned with machinery at that time, and it was considered essential for students of the subject to have a grasp of several areas of mechanical engineering. Harold W. Mansfield joined Steinmetz's department in the fall of 1904 with the title Instructor in Mechanical Engineering, to teach hydraulics, turbine design, steam engine theory and design, thermo-dynamics, gas engines and steam turbines. Walter M. Curtis succeeded him the next year and served for two years, after which regular electrical engineering faculty taught the courses.

MORTIMER SAYRE, who joined the faculty in 1914, held a mining degree from Columbia University and had worked in mining and railroad engineering. Attached, with the civil engineers, to what was then called the General Engineering Department, he bore the title, from 1918, of Assistant Professor of Applied Mechanics, but most of his research concerned metallurgy. Sayre would eventually lead the campaign for a separate mechanical engineering department.

In mid-1928 a trustee committee considered the proposal to establish a department, but the Depression soon rendered any expansion unthinkable. The next year, following the death of HOWARD OPDYKE, a member of the Physics Department, JOHN NICHOLAS VEDDER was moved from the Electrical Engineering

Department to a newly established "Department of Mechanics and Thermodynamics," in which he taught mechanical engineering subjects. The "department" did not survive Vedder's death in 1936.

In 1941, President DIXON RYAN FOX asked trustee chairman WALTER C. BAKER to head a committee to consider several questions about the post-war College. The first three were:

- 1) Should we continue to teach Civil Engineering?
- 2) If not, should we teach Mechanical Engineering?
- 3) Should we attempt both in addition to specially emphasized Electrical Engineering?

The committee's report tentatively endorsed the idea of replacing civil engineering with mechanical engineering, and for several years the introduction of mechanical engineering was often discussed in those terms.

In the late 1940s, as the postwar bulge of veteran students supported by the GI bill waned, concerns about the future of the College and of the engineering programs provided an opportunity to push for the new department. Trustee Ralph Bennett, a strong advocate for mechanical engineering, believed it should perhaps replace civil engineering, which at that time was not drawing many students. Professor WARREN TAYLOR, then chairman of civil engineering, had joined the Union faculty about the same time as Sayre, and the two men had developed a deep-seated mutual dislike. Taylor opposed the formation of the new department, in part because of concern for the future of his department and in part because of his antipathy to Sayre. Professor H. Gilbert Harlow, who became chairman of civil engineering in 1950, did not oppose the proposed new mechanical engineering program (at least, not with Taylor's fervor).

Working with a detailed curriculum, staffing and budget proposal Sayre had drafted in November 1949, Bennett produced a report on June 9, 1950, which recommended addition of a program in mechanical engineering, to begin in the fall of 1951. The Engineers Council for Professional Development and engineers at GE and the American Locomotive Company had given the plan their informal blessing.

An ensuing study by a faculty-administration committee registered faculty and other viewpoints—pro: the program would make the college more appealing to prospective students, would prepare them for a field in which there are many attractive jobs, would stimulate the whole engineering program, and, by strengthening one area, would benefit the whole College; con: the program would increase the already excessive commitment to specialized or technical education, would lead to an undesirable increase in the size of the College, or else a decrease in non-technical areas, and might supplant the venerable program in civil engineering.

Four days after that report, which carried no recommendations, the board resolved, on January 19,

1951, subject to the approval of the Faculty Council, to begin a mechanical engineering curriculum as soon as was reasonable. At the June 1951 trustees meeting, the Faculty Council having taken no action, the board voted to announce the program in the catalogue.

At their December 11, 1951, meeting, following a referral of the proposal to the divisions, and after hearing a spirited discussion, with expressions of concern from representatives of the Social Science Division about balance of the College and added financial strain, the Faculty Council voted 12–3 to begin the mechanical engineering curriculum (slightly amended) in September 1952.

In addition to Sayre, Walter Lowen was already on the faculty, and had begun to gather equipment. Attracted by the possibility of a mechanical engineering department, he had joined the Civil Engineering Department in January 1947 to teach courses in thermodynamics and heat engines, among others. Lowen went to a war surplus sale and "because Union College had never gotten anything before, I got all my requests approved." A wartime temporary building was moved to the back of the General Engineering building in 1947 and set up as a combined Heat Engines Lab and MACHINE SHOP.

Sayre and Lowen obtained a small gift from ALCO and a \$75,000 gift from the GE Education Fund. Much of this generous grant, which made the department viable from the start, was used for the purchase of equipment from GE and other companies and for building an addition (1954) to the laboratory-shop building. Classrooms and faculty offices were in the General Engineering building (see CAMPUS CENTER) until construction of the SCIENCE AND ENGINEERING CENTER in 1971.

Sayre, Lowen, and Walter Mathias (who, with the title Instructor in Mechanical Engineering, managed the machine shop) comprised the initial faculty. By the time the seventeen survivors of the original thirty-nine member class graduated in 1956, the department faculty had grown to seven:

1953: Associate Professor Gardner M. Ketchum, who had been a teaching assistant and instructor at MIT and a Development Engineer at GE's General Engineering Laboratory, 1948–53. Instructor Richard Gebhardt, who had graduated from Union that year as an electrical engineering major.

1954: Assistant Professor Raymond Eisenstadt, from Lehigh University.

1955: Assistant Professor William C. Aubrey, an engineer at GE's General Engineering Laboratory, hired in January after Gebhardt was called to active duty in the Air Force. Associate Professor Filadelfo Panlilio, from the University of the Philippines. Professor Joseph Modrey, from Brooklyn Polytechnic Institute, to succeed the retiring Sayre as department chairman.

Ketchum, Eisenstadt, Aubrey and Modrey all brought substantial industrial experience to their teaching.

When the Engineers' Council for Professional Development (ECPD) accredited the curriculum in 1957, their report stated in part:

The program in Mechanical Engineering has been carefully planned and is being reasonably well executed.... Several of the staff... have been at Union a relatively short time. Whether this staff can be retained is questionable particularly as the salary scales in the higher ranks are still deficient.

On January 27, 1960, the acting department chairman was able to report that there had been no turnover in the permanent teaching staff and that salaries had increased by twenty-five percent, and would further increase in the coming year.

In 1962 all engineering curricula were examined and re-accredited for three years. The principal general comments were: "The curricula exhibit strengths which would ordinarily justify full term accreditation [of five years]." The faculty was "interested, dedicated, but overloaded," but the future would appear uncertain "unless reduction in teaching loads, increases in faculty salaries, and an atmosphere conducive to research and scholarly production can be accomplished."

The report on Mechanical Engineering praised "a fine, enthusiastic staff" and "a well conceived, forward-looking" curriculum, but warned that "more and better laboratory space will be needed," and concluded "the potential exists for an outstanding Department."

In the 1950s, the standard teaching load was twelve credit hours each semester, with a three-hour laboratory counting for two credit hours. Teaching a graduate course in the evening program was for extra hours and extra (though meager) pay, but the opportunity to teach at an advanced level was important to most of the department. Consulting work, when and if available, and research or other scholarly activity was a further expenditure of time which sometimes brought in additional money. Coming from GE, this author had an agreement with that company for one day a week consulting and summer employment. There was no provision for, or expectation of, research activity, except as it might arise in his GE work.

The early years of the department were exciting and occasionally tumultuous. The mechanical engineering faculty were an extremely compatible group, though drawn from varied backgrounds and picked by Sayre, who retired in 1955. His successor, Modrey, was a complex individual—very bright, quick to show displeasure and slow with praise, but he was a good example professionally and good-hearted once you passed a bluff exterior. He did not get along well with his counterparts in civil and electrical engineering (Harlow and Goodheart respectively); Harlow recalls

that their relation was not unlike that between Taylor and Sayre. Impetuous and strong-minded, Modrey felt that the other department heads in engineering set up road blocks to his attempts at creative developments, and that President Davidson and Dean Huntley inevitably sided with their traditional approach. Ketchum was appointed chairman of the department in 1962.

Lowen, whose background was strong in internal combustion engines, went to the Oak Ridge National Laboratory on sabbatical in 1954/55 to participate in the Oak Ridge School of Reactor Technology program and to do consulting work. This experience led him to develop an undergraduate course in reactor engineering and a full-year graduate course in nuclear engineering and technology. It also led to Union's participation in a joint university—Oak Ridge expansion of the ORSORT program. Union was one of six colleges and universities selected to present the first half of the year-long program, beginning in the spring of 1957. Although the program disbanded after only a couple of years, several of its students eventually earned master's degrees from the College.

On a 1961–62 sabbatical leave, Lowen earned a doctorate from the Eidgenössische Technische Hochschule (ETH) in Zurich, Switzerland. Modrey spent a sabbatical year at Imperial College, London in 1962–63 and received a PhD from RPI in 1963. Panlilio's *Elementary theory of structural strength*, long in preparation, appeared in 1963. Ketchum and Aubrey began a text which would present basic thermodynamics and fluid mechanics as a unified subject, but abandoned it after another book with a similar approach was published without success.

Aubrey obtained a master's degree from Union in 1958. Eisenstadt developed a materials testing program with a major emphasis on fatigue and crack propagation, which he continued throughout his tenure at Union. He received research grants of over \$300,000 from General Electric, NASA (Lewis Lab) and ASTM, which permitted employment of a number of students, and also provided a basis for several student senior projects and master's theses. A major development was a procedure reported in a paper "The Generation of Crack Propagation Data on Notched Rotating Beam Specimen by Means of an Interrupted Stressing Technique" (*Journal of Basic Engineering*, ASME, March 1970), co-authored by Ware D. Fuller, an undergraduate.

In the first ten years (1956–65), 172 students graduated with a BSME. A 1982 survey found 51 of these (thirty percent) had obtained master's degrees, all but five in engineering or business; ten had PhD's or equivalent—six in engineering, and one each in math, physics, religion, and music theory; and three had degrees in law.

Modrey left Union in 1965 to teach at Purdue University, where he stayed to retirement. Lowen served as chairman in 1966/67 while Ketchum was on sabbatical leave, and then spent 1967/68 on a leave of absence at SUNY-Binghamton. After helping to establish their School of Advanced Technology, he accepted an invitation to become dean of that school, and the department lost its senior active faculty member. In 1965, J. Richard Shanebrook joined the faculty as the first new face in ten years.

In 1959, in part as a result of ECPD criticisms in the 1957 accreditation review, the basic mechanical engineering program requirements in credit hours were reduced from the original 154 hours to 140. Part of the reduction came through elimination of summer courses in surveying and machine shop practice.

A major curricular change occurred in 1966, when the College switched from a semester calendar to a trimester calendar with three courses taken each ten-week term. (See CURRICULUM and CALENDAR AND DAILY SCHEDULE). The change was passed, after much debate, but was opposed by much of the engineering faculty, which believed that the engineering curricula of forty-four or more courses could not conceivably be cut to thirty-six. In fact, it wasn't, for we were allowed to include four extra half-courses (graphics, descriptive geometry, and computer programming) in the first two years. The new calendar required engineering students to take thirty-eight courses while the rest of the college took thirty-six.

A promised reduction in teaching load, from eight standard courses a year (meeting three times a week for fifteen weeks) to seven revised courses (meeting four times a week for ten weeks) materialized for Divisions One and Two, but seemed illusory to instructors with time-consuming laboratory, drawing or programming sessions.

In 1965, the College was reorganized into two centers—the Center for Humanities and Social Sciences, and the Center for Science and Engineering. In 1966, at the same time that the new curriculum was established, James Palmer, an electrical engineer, was appointed dean of the latter center. Some trustees and the ECPD had pressed since the 1950s or earlier for creation of a dean of engineering, and Palmer's appointment satisfied these pressures.

A major accomplishment of the Palmer era was the construction of the Science and Engineering Center, to which the department moved in 1971.

A period of frequent faculty changes began in the mid-1960s. Aside from instructors who left after a short period because they were not fully satisfactory, some departed in part because receiving tenure seemed unlikely after the department was mostly tenured. Others of exceptional quality chose to pursue attractive opportunities elsewhere rather than go through the complicated tenurability process introduced in 1973;

Fred Haag and Donald Potter were notable examples. A materials scientist who went to the Argonne National Laboratory and then to the University of Connecticut, Potter was succeeded by Frank Milillo in 1974. Milillo completed a research project Potter had started, and has since worked with Potter on other projects. Shanebrook has conducted extensive grant-supported research on artificial heart valves, work in which undergraduates have often participated.

Ketchum resigned as department chairman in 1974 and was succeeded by Shanebrook. Aubrey served from 1979 until 1987, when Milillo took over.

Four of the original faculty members continued at the college to retirement, and all of them retired in a short span: Ketchum in 1985, Panlilio in 1987, Eisenstadt in 1988 and Aubrey in 1989. The department had to be rebuilt in a short period; only Shanebrook and Milillo were on the faculty in 1985 and in 1989. Mario Rivera came to Union from RPI in 1985; Frank Wicks started in 1988; Rudolph Eggert and Richard Wilk started at Union in 1989, and Ann Anderson in 1992.

As noted above, in the first decade the department graduated an average of seventeen students a year. In the next decade, the numbers ranged from nine (1965) to thirty (1969), for an average of twenty. In the late '70s, the numbers of BSME graduates increased dramatically, to an average of forty a year. Between 1976 and 1980, forty-five of the two hundred graduates were evening division students. A high of eighty-five graduates was reached in 1984; since then the numbers have dropped to twenty in 1991 and thirty-one in 1992.

**Graduate, Summer and Evening Programs.** A limited graduate program had been offered in the early post-war period, even before the department was formed. There were many young engineers in the area, primarily at GE, who might be attracted by a broader program; this author, who had directed a thesis for one student who received a degree in 1954, became involved in developing a full-scale graduate program in the evening division. Some courses were added piecemeal, and then a major revision was instituted in May 1957. Most of the regular mechanical engineering faculty as well as many exceptional people at GE and elsewhere were involved in teaching graduate courses. Exact information on the department's master's program is unavailable, since all engineering graduates receive the same MS in Engineering degree, but an estimated six to eight persons a year finished the program in 1960–80, and nine to thirteen a year in 1981–92.

In the 1960s Eisenstadt developed a summer program of Technical Short Courses offered through the Continuing Education Program. Faculty was drawn from local and national experts and others; the students came largely from university faculties, industry

and research institutions. In the summer of 1979, for example, nine courses were given to a total of 225 students. Shortened versions of two of these courses were given at the Aberdeen Proving Grounds.

Some undergraduate courses were available in the evenings in the early years, though enrollments were small until the '60s. The first student received a BS in ME from the evening program in 1963, and a total of sixteen had graduated by 1970. Enough students were then enrolled to permit offering upper class courses on a two- or three-year rotation schedule, and in the next decade seventy-nine mechanical engineering majors earned bachelor's degrees in the evening division.

—Gardner M. Ketchum\*

**Melius Conservatory.** Following two annual pleas by President Richmond in his midwinter report, Ludlow Melius '96 gave \$5,000 in the fall of 1926 for the construction of a steam-heated twenty-five-foot by fifty-foot greenhouse between NORTH COLLEGE and HASKINS LABORATORY. It was built by the American Greenhouse Co. of Chicago.

Intended to accommodate both botanical laboratory work and the starting of plants for JACKSON'S GARDEN, in later years the conservatory was used largely for the second purpose. Another greenhouse was built beside it in 1972, and both were razed during the summer of 1993 in preparation for construction of the Yulman Theatre.

**Memorial Chapel.** Built in 1925 as a chapel and meeting hall to replace Old Chapel, Memorial Chapel honored Union men killed in all wars up to that time. Until the Humanities Building opened in 1967, it also housed the offices of the music faculty.

President CHARLES ALEXANDER RICHMOND, a clergyman accustomed to preaching in a proper church, had long wanted to build a chapel at Union, but the need for other buildings—the General Engineering Building (1910), the Alumni Gymnasium (1914), and Butterfield Hall (1918)—pressed him more. Sentiment for using the Butterfield bequest to build a chapel met opposition from others who felt that Butterfield's piety fell short of what should be required of chapel donors.

When a fund-raising campaign began in 1919, the existing chapel in Geological Hall was much too small for the College's increased enrollments and for public events. Funds were solicited from Schenectady residents with the promise (which has been kept) that many events in the building would be open to the public.

Built by Hanrahan Brothers of Schenectady at a total cost of about \$226,000, Memorial Chapel was designed by Lawrence Grant White of McKim, Mead and White (reputedly the first major building he designed on his own). The land on which it was erected

had been marsh as recently as 1907. Ground was broken March 27, 1924, the cornerstone was laid June 8, 1924, and the building was dedicated October 25, 1925.

The "memorial" aspect of the chapel has been the subject of confusion from the beginning. Although built soon after the end of the First World War, the chapel was never intended to commemorate exclusively the Union men who died in that war. During the fund-raising period, the chapel was described in the *Concordiensis*, perhaps with authority, as an intended memorial to the approximately two thousand Union men who had *served* in all wars, but when the building was finished President Richmond dedicated it to the memory of Union men who *died* in all wars (the War of 1812, the Mexican War of 1846, the Civil War, the Spanish American War in 1898, and the First World War). However, only the names of the twenty-six Union alumni who died in the First World War were inscribed on the south wall at the rear of the chancel.

When opened, the building contained several other separate memorials and gifts: The chancel (memorial to the Rev. John D. Wells '38), the chairs in the chancel (William S. Cassedy '91), the reading desk (Gaylord Judd Clarke '59), the pulpit (Rev. Herman Vedder, class of 1799; Barent A. Mynderse '49; and Herman Vedder Mynderse '84), the endowment for the pulpit (Rev. Thomas Lamont '56), the bronze lights at the entrance (gift of Edwin Wilbur Rice '54), the clock in the tower (gift of Edwin Wilbur Rice Jr.), the chimes (gift of the Class of 1922), and the large Bible (gift of Rev. George H. Kling, '24). A few of the window panes were of floated glass which had survived from the early days of North and South College dormitories.

After the Second World War, a memorial table presented by the Board of Trustees to commemorate the Union men who died in that war was placed beneath the First World War necrology on February 19, 1947.

The organ was made by Casavant Freres; the chimes in the tower by Meenely and Co. (see BELLS AND CHIMES).

The presidential portraits then owned (Smith, Edwards, Nott, Hickok and Raymond) were moved from Old Chapel to Memorial Chapel in early 1926. Others were added later, and those of the missing presidents joined the collection through the efforts of SAMUEL FORTENBAUGH.

Memorial Chapel has always, of necessity, been used for secular as well as religious purposes—indeed, the trustees fixed a rental fee for outsiders at the time the building was dedicated. The ambiguous status of the chapel has led to occasional controversy. A student jazz band played there May 19, 1948, and on April 28, 1952, the Billy Taylor Trio and the Rex Stewart Band appeared in what the *Concordiensis* proclaimed "probably the first college-sponsored jazz concert held in the

United States." In the spring of 1958, however, President CARTER DAVIDSON threatened to ban future jazz concerts in the chapel, because of the smoking and drinking associated with them.

In October 1965, NORMAN JOHNSON, chairman of the Committee on Religious Life, denied the sophomore class permission to have a rock and roll concert in Memorial Chapel, on the ground that such a performance did not represent "the standards of the college." He was overruled the next week by the full committee, but the controversy simmered for a while, and there was continued concern about physical damage and trash. Concerts of all kinds, however, continued to be held in Memorial Chapel until at least the fall of 1980 (and in the fall of 1974, as part of a concert by a Union group called "Chet Arthur and the Flaming Aces," one of the performers drove a motorcycle down the center aisle). By the fall of 1982, "hard rock" concerts were banned in Memorial Chapel.

Political uses have also aroused concern: in 1948 the trustees went on record as opposing the Chapel's use by political parties, but this regulation proved impractical.

In winter 1967/68, some of the front pews were removed, and an apron extended into the main body of the chapel so that symphony orchestras could be accommodated without constructing temporary stages. At the same time, the organ and the pulpit were made portable and a screen was placed in front of the necrology on the south wall. These changes, in the view of some, effectively transformed the building from a memorial chapel into a performance hall.

Stairways to the balcony at the front of the chapel were added in the late 1970s to comply with the fire code.

President Richmond was particularly proud of Memorial Chapel, and in 1932, as ex-president, he obtained the trustees' consent to the construction at his expense of a crypt to the west of the stage, to receive in due course his ashes and those of his wife. Designed by McKim, Mead and White, the crypt was put to its intended use in 1940 and 1950 respectively. For many years Richmond's portrait hung near the spot.

In 1995, Memorial Chapel was thoroughly refurbished for the celebrations of the Bicentennial.

**Memorial Field House.** The Field House, completed in 1955, provided the College for the first time with indoor practice space for all sports and with better facilities for basketball games than had been available in ALUMNI GYMNASIUM. The building has also been used for track meets and for non-athletic events drawing audiences too large for Memorial Chapel, such as commencements and inaugurations. The Field House is a memorial to the sixty-five Union men killed in the Second World War; their names are engraved on a bronze plaque in the foyer.

The need for a field house had long been evident, and a movement to build one began soon after the end of the Second World War, when the director of alumni relations proposed to the president and the chairman of the Board of Trustees that raising money for a field house as a war memorial be made the goal of the Alumni Fund for the next several years. That plan, though approved by the board on June 6, 1947, was controversial, because there were several other needs at least as pressing, a new library the chief among them. A poll in May 1948 found that 426 of 543 students surveyed, and 69 of 70 faculty members, wanted "a broader building program."

The director of alumni relations urged that a field house would make the most appropriate war memorial because many of the alumni killed in the war had played on athletic teams. There are indications, however, that the decisive factor for the administration was that Union's alumni were expected to contribute more readily toward a field house than toward a library. It is true that when a library was finally built, the biggest contributors were non-alumni, but contributions toward the Field House were also disappointing, and the trustees eventually paid a large part of the cost.

Construction of the Field House was delayed by a freeze on building materials at the start of the Korean War, and then by rapidly rising prices. The bids opened in February 1954 far exceeded the \$500,000 that had been raised, and architects MCKIM, MEAD AND WHITE had to scale back their plans. New bids were solicited based on substituting wooden roof trusses for steel, and wood for galvanized metal on the ends of the building, eliminating one public entrance and some interior facilities, and substituting a simpler heating system. The field house originally envisioned would have been suitable for speakers and concerts; the building finally erected, though sometimes used for those purposes, was unmistakably a utilitarian athletic field house, with acoustics to match.

Scaling back the plans gave the building its principal distinction: the laminated wooden arches were said to be the longest ever built, measuring 254 feet from tip to tip, and spanning 190 feet. The Field House was also provided with what was claimed to be the first commercial 400-cycle lighting system.

Groundbreaking ceremonies were held April 20, 1954. The building was constructed by the Albany firm of McManus, Longe, Brockwehl & Co., all three of whose principals were members of Union's Class of 1942. The Field House was used for the first time for a basketball tournament in December 1955.

The dirt floor restricted the building's uses; after expanded enrollment and the introduction of women's sports had placed great pressure on all the College's athletic space, the Field House was renovated and remodeled in 1973. A Tartan (plastic) surface replaced

the all-dirt floor, and provision was made for two basketball courts, three tennis courts, a 1/10 mile track, and volleyball and badminton courts (many of these occupied the same space and could not be used simultaneously.)

By 1980, some functions had overflowed into trailers permanently parked along the building's south side; they were removed when an addition to the building in 1989 added showers, lockers, and an equipment-issuing room.

**Middle States Association of Colleges and Schools.** The primary accrediting agency for New York, New Jersey, Pennsylvania, Delaware, Maryland and the District of Columbia, the Middle States Association was founded in 1887. When the Association established a Commission on Higher Education in 1921, Union was one of the charter members.

Accreditation teams from the Commission visited the College in 1957, 1969, 1980 and 1991. In advance of each visitation, faculty and administration committees prepared "self-study" reports in the areas the teams were expected to scrutinize; by thus focusing the institution's attention on its problems, these studies were generally agreed to benefit the College at least as much as did the accreditation reports themselves.

**Military Science.** Intermittently throughout its history, the College has offered instruction in military science.

Union students formed a cadet corps in 1823; until the early 1830s, it drilled and made overnight forays (see STUDENT ORGANIZATIONS: MILITARY). The corps was at first under the direction of the College registrar, Major JONAS HOLLAND, a veteran of the War of 1812; later professor ISAAC JACKSON took charge.

The first quasi-academic study of military science came during the CIVIL WAR, when professor WILLIAM MITCHELL GILLESPIE (a civil engineer with no military experience) lectured the cadets in professor ELIAS PEISSNER's company of UNION COLLEGE ZOUAVES on "The Art and Science of War" during 1861/62 and 1862/63.

In 1873, under president ELIPHALET NOTT POTTER (who had seen something of the Civil War while serving as a chaplain), Union instituted compulsory military instruction. On the invitation of the trustees, the Army detailed Brevet Captain Thomas Ward to the College. A West Point graduate and Civil War veteran, Ward served as Professor of Military Science and Director of Physical Culture, taking charge of the gymnasium, then under construction (see BECKER HALL), and also "aiding the engineering department." As the appointment suggests, military science was considered a branch of civil engineering, and drill was conceived as a form of exercise. Students studied Upton's *Tactics*.

Formed into two companies (North College and South College), the cadets selected their own uniform, described as "of dark blue flannel, consist[ing] of a tight fitting sack coat, trimmed with half inch black braid; dark blue pants, and dark blue navy cap, designated by neatly embroidered gothic letters UC."

Ward served until August 1877. His successors were Lt. Clermont L. Best (January 1878–summer 1879), Major Junius W. MacMurray (1880–83), Lt. Henry W. Hubbell (1883–86), and Lt. Henry Hill Benham (1886–89). Best's title was Professor of Military Tactics; MacMurray, Hubbell and Benham were Professors of Military Science and Tactics.

In the spring of 1875, the Army supplied 150 Springfield breech-loading rifles and 25 swords. The rifles were stored at first in the "armory," but later cadets were apparently allowed to keep them in their dormitory rooms. By 1882, a rifle range was constructed in the College woods.

In the beginning, seniors heard lectures twice a week and drilled on the other three days. Juniors drilled two days a week, and the two lower classes may not have been required to take the course at all. In the fall of 1875, all students were required to drill four days a week, but changes in the requirements were frequent, and by 1881 juniors and seniors were allowed to substitute Physical Culture or History.

The military science course carried academic credit; instruction included drill, target practice, and military signaling, as well as recitations and lectures on tactics, army regulations and the art of war, military surveying, bridging, field fortifications, organization of volunteers and militia, organization of the supply departments of the army, customs of the service, and "other practical information that would be useful in the emergency of war."

By 1883, upperclass enrollments in the course were so low that the army began taking some of its rifles back. Lt. Hubbell made a special appeal to juniors and seniors to enlist at least briefly so that he could report higher enrollments.

With the expiration of Lt. Benham's appointment in the summer of 1889, president HARRISON WEBSTER (a Civil War veteran) abolished the military science course.

Union never again required military instruction for all students. Subsequent military programs are described in the articles on FIRST WORLD WAR; SECOND WORLD WAR; and AIR FORCE RESERVE OFFICERS TRAINING CORPS.

**Miller, H. Wharton** (Sept. 9, 1889–March 6, 1970). Librarian of Union College, 1921–27.

Born on Staten Island, Wharton Miller, as he usually styled himself, graduated from Columbia University in 1913, remaining to do graduate work in anthropology while working part-time as head of the

university library's binding department. He then spent two years as a reference assistant at the Newark Public Library before becoming assistant librarian at the Syracuse Public Library in 1916. In 1915 and 1916 he took courses at the New York State Library School in Albany, but he did not earn a degree at that time.

Miller served in the U.S. Army, January 1918–May 1919; returning to his position at the Syracuse Public Library, he also taught manuscript and proof reading in the journalism and secretarial science courses at Syracuse University.

When President RICHMOND decided to replace the inefficient DEWITT CLINTON as Union College Librarian, he hired Miller on January 1, 1921, as Clinton's assistant, with the understanding that Miller would become the librarian after a brief transition period. Clinton retired in 1922.

A much more professional librarian than Clinton, Miller completely reorganized the library, increasing its accessibility to students and faculty by removing the iron gates from the book alcoves. He inaugurated the practice of giving talks to freshmen on the use of the library, taught a full-year course in bibliography for seniors who expected to go on to graduate work, and gave frequent radio lectures on books.

Miller also entered into an unusual relationship with the New York State Library School in Albany; from 1924 until the school moved to New York City in 1926, he lectured there on bookbinding, but in 1925 and 1926 he was also a student, finally completing in the latter year the work for a BLS he had begun in 1915. In 1925 he was appointed associate editor of the new revision of Melvil Dewey's *The decimal classification*.

Miller had trained as a fencer under James Murray, *maitre d'armes* of the New York Athletic Club and coach of the Columbia University fencing team; in 1925 he became the instructor of Union's fencing club.

Resigning from Union July 1, 1927, Miller was appointed director of the Syracuse University Library and director of the university's library school. He remained at Syracuse until his retirement in 1955, serving as president of the New York Library Association in 1930–31.

See also: LIBRARIES.

**Minerva's Laws.** Union's motto ("*Sous les lois de Minerve nous devenons tous freres*") sometimes leads people to suppose that the Roman goddess literally promulgated laws. Alas for those who want her guidance, the motto is merely an eighteenth-century attempt to evoke fealty to the undefined dictates of learning. See SEAL AND MOTTO.

**Modern Language Building.** The building which housed Union's Modern Language Department from 1947 to 1967 was one of three extremely utilitarian one-storey wooden structures moved from

Rome Air Force Base and erected on campus at government expense. (The other two were the LIBRARY ANNEX and the MACHINE SHOP.) The Modern Language Building was erected on Alexander Lane, north of Butterfield Hall.

The Modern Language Department had been in Bailey Hall until that building became overcrowded in the aftermath of the Second World War. The new building, called "temporary" when first occupied in September 1947, deteriorated rapidly—rotting floor stringers had to be repaired at the end of 1951, and mushrooms were later reported to be growing in the men's room—but the department remained in it until the Humanities Building opened in February 1967.

As "40 Alexander Lane," the building was then occupied by VITA until it was razed in mid-summer, 1970.

**Modern Languages and Literatures Department.** Union, which broke with tradition in choosing French to express the Enlightenment ideals of tolerance and social harmony in its motto ("*Sous les lois de Minerve nous devenons tous freres*") (see SEAL AND MOTTO), also found a special place for that language in its first curriculum. Because, as the 1802 laws of the College put it, "there may be students not designed for those learned professions in which the knowledge of the Greek language would be indispensable," applicants were allowed from the College's opening in 1795 to offer competence in FRENCH in place of the Greek admissions requirement, and to substitute French readings for Greek readings in all four years.

Union was neither the first American college to teach French nor the first to allow its substitution for Greek. The language was taught at Columbia from 1779 and at William and Mary from about the same time. Hampden-Sydney Institute briefly experimented in 1784–86 with allowing students to substitute French for Greek in the curriculum, and Williams, which for a time (1793–99) allowed substitution of French for Greek as an admissions requirement, established its first French professorship in 1795. Nevertheless, when Union was founded most colleges still required all students to study Greek.

In their first year ("The Class of Languages"), Union students could read *Gil Blas* in French instead of the New Testament in Greek; in the second year, a history of the French Revolution could replace Xenophon; third year students could choose Bossuet's *Discours sur l'histoire universelle* in place of Homer and more Xenophon, and in the senior year, Buffon's *Histoire naturelle* ("or some other approved French author") could be substituted for Longinus. In other respects, all took the same curriculum, including Latin.

The 1795 laws had warned that availability of the French option depended on whether "the funds of the



College shall hereafter admit the institution of a Professorship in the French Grammar." That caveat was dropped from the 1802 laws, suggesting that some ad hoc provision may have been made for teaching French. By 1807, under President Eliphalet Nott, the option of substituting French for Greek was removed. French could be studied, with the president's permission, but not in place of Greek.

Because records of the College's early years are scant, we do not know how many students—if any—availed themselves of these options, nor do we know who—if anyone—taught French before 1806. In that year Count PIERRE GREGOIRE REYNAUD, later described as "a refugee from the revolutions in France," was appointed as Union's first professor of a modern foreign language, with an annual salary of \$500. Students wishing to study French under Professor Reynaud paid a surcharge of \$3.35 per term. Three years later, in September 1809, the trustees terminated the professorship:

Whereas an attempt has been made to introduce the French language generally in this institution, and whereas the said attempt has failed and there appearing no probability that any further effort of the trustees would be more successful, and the funds of the Board not being in a state to warrant the continuance of any professorship not indispensable, [it is] therefore resolved that the French professorship be and is hereby dissolved provided however Mr. Reynaud should wish to remain in the institution [as a free-lance tutor, with a yearly subsidy of \$100 from the College] till he can obtain a situation elsewhere....

Reynaud remained, in fact, for another thirteen years on these terms, which were common in the collegiate teaching of modern languages at that time. Instructors were permitted to take students from outside the institution as well, and Reynaud presumably did so.

In 1826, four years after Reynaud's departure, President Nott appointed the Rev. PIERRE ALEXIS PROAL "Teacher of the French Language." Proal, who was also rector of St. George's Episcopal Church, taught French and Spanish at Union until he moved on to a church in Utica in 1836. SPANISH and ITALIAN entered the curriculum in 1828 and 1834 respectively, as "voluntary studies," with classes formed when the demand was sufficient to justify them. GERMAN first appeared in 1830, but the instructor for the first eight years is unknown. In 1838 Nott appointed JOHANN LUDWIG TELLKAMPF Professor of German Language and Literature and Lecturer on Civil Polity and History. After Tellkampff resigned five years later to accept the newly created chair of German at Columbia, German instruction continued erratically until 1851, when the flamboyant ELIAS PEISSNER made his entrance as Professor of the German Language and Literature, and Instructor in Latin. Peissner gave his life for the North on the battlefield at Chancellorsville in 1863, but in 1865 German found a secure place in the

curriculum with the appointment of WILLIAM WELLS, who would teach until 1902.

Beginning in 1828, students pursued either the Classical Course, with several years of Greek and Latin and no modern languages, or the Scientific Course, with Greek and Latin in the freshmen year and an upperclass modern language requirement that changed several times; it increased in 1851 from one trimester each of French and German to two of French and one of German.

In 1854, Nott introduced a more fully divided curriculum, and thereafter students in the scientific course studied no classical languages but were required to take two terms of French with an optional third term, and three terms of German. Both courses continued to lead to an AB degree, but graduates of the scientific course, until 1894, received a diploma in French (a German diploma, though initially offered, was apparently never issued).

1854 was the fiftieth anniversary of Nott's presidency; in an address at the celebratory proceedings he reaffirmed his institution's uniquely practical and progressive curriculum:

though the usual curriculum of studies, including the Greek, the Latin, and Hebrew languages, has been carefully preserved, a separate scientific course has been instituted, in which the modern languages have been substituted in place of the ancient...

In 1865 the language requirement for the scientific course more than doubled, to six terms of French and eight of German (reduced in 1869 to six). The two-year civil engineering course, originally requiring no languages, added a French and German requirement in 1866. By 1857, and probably earlier, classical students were allowed to take modern languages as an extra study; from 1887, they were required to take a year each of French and German.

Between 1890 and 1940, the basic contours of Union's offerings in modern languages changed surprisingly little, except that under the major curricular reform accompanying introduction of the divisional system in 1933/34, the language requirement for engineering students was dropped and the requirement for majors in the humanities division increased to two years of two languages. Spanish had become a regular offering in 1904 and by 1918 achieved, for a while, full partnership with French and German. The *Catalogue* of 1939–40 lists seven courses in German, six in French, two in Spanish and two in Italian.

Administratively, Modern Languages began to acquire departmental trappings under William Wells (1865–1902). After four years with no senior faculty members in the department, FRANK COE BARNES served as chairman for twenty-eight years (1906–34). His successors and their terms have been: MORTON COLLINS STEWART (1934/35); GEORGE DANTON

(1935–47); Gordon Silber (1947–59); Frederick Klemm (1959–71); Paul LeClerc (1971–77); Anton Warde (1977–86); Helen McDermott (1986–88); and Sigrid Kellenter (1988–).

With the influx of veterans in the years after 1945, BAILEY HALL could no longer accommodate all the departments in the humanities and social sciences, and in 1947 Modern Languages found a new home in a one-storey wooden structure moved from the Rome Air Force Base to a site just west of Butterfield Hall. The MODERN LANGUAGE BUILDING, often called the “language shack,” with its fiberboard partitions painted hospital green and its creaky floors admitting wind and rays of light—and, where pipes entered the restrooms from below, even the tendrils of weeds—was to have been only a temporary solution to the space shortage. But two decades passed before the Modern Languages, along with Classics, English, and Philosophy, moved into the new HUMANITIES BUILDING adjacent to Schaffer Library.

For students of modern languages a most welcome feature of the new quarters was an up-to-date and visually dazzling language laboratory to replace the oversized closet that had housed a half-dozen portable Wollensak and Revere tape players.

The postwar curriculum decreased the foreign language requirement for Division One majors from two years of two languages to two years of one language, the same as that for other AB and general BS candidates. Engineering students continued to be exempted. In response to the Cold War, RUSSIAN was added to the curriculum in 1947. CHINESE was first offered in 1963/64.

As at most other colleges, completion of the second full year of a foreign language, or demonstration of equivalent mastery on an examination, satisfied the requirement. But, also like most other American colleges and universities, Union dropped this requirement in 1971, bowing to the pressures of the Vietnam War era for a redefinition of the “relevant.” The crucial Faculty Council vote (6–5) came after three divisions had voted against the abolition proposal, which, however, was strongly pushed by the administration.

Faculty in the department—renamed in that year “Modern Languages and Literatures”—quickly responded to the expected drop in enrollment by introducing new offerings in literature in translation, such as William Thomas’s “The Artist as Hero in European Fiction” and Anton Warde’s “Idealism and Irony in German Literature,” courses that easily enrolled thirty to forty students seeking to fulfill their requirement in “Comprehensive Education.” Union’s general education program in the ’70s. Enrollments in language classes did indeed drop approximately thirty percent in the first year without the language requirement, but by 1975/76 the infusion of female students at a rate of 175 or so each year for four years had expanded the

student body from 1,400 men to 2,000 men and women and restored foreign languages enrollments to their previous norm of approximately 1,000 per year.

The advent of TERMS ABROAD had also fostered more language study. Frederick A. Klemm, Union’s “Father of Terms Abroad,” established the model when he conceived and led the first “Spring in Vienna” program in 1969. In the fall of the same year, Alan Roberts conducted the first term-in-France, in Angiers and Rennes, and Klemm established the Spanish Term Abroad with a program in Bogota, Columbia, in the winter of 1970. By 1990, Union’s Term Abroad empire comprised fifteen programs. Only the French, German, and Spanish Terms Abroad required participants to complete several language courses before leaving and stressed language learning on the site, but language study nevertheless constituted at least an element in the programs in Israel (founded in 1973), Italy (1974), Japan (1984), and China (1986). Union also maintained two junior-year-abroad exchanges for selected students of German: one at the Die Eidgenössische Technische Hochschule in Zürich (see ETH PROGRAM), and one at various German universities in cooperation with the Federation of German American Clubs.

Coeducation (1970) and Terms Abroad caused a department that some had feared would be overstaffed to find itself increasingly understaffed. The exciting literature-in-translation courses fell dormant as faculty members scrambled to cover just the courses in foreign languages. This was the era of the demoralizing “zero sum game,” in which any growth in one department at the College came at the expense of a reduction in staff in some other department. The department lost three full-time positions during the period because the sciences could compellingly point to overcrowded classrooms and laboratories. In the early ’70s, German lost its annual visiting lecturer, shrinking from an FTE of 3.5 to 2.5, and Russian waned from one tenure track position to approximately half of an adjunct position. In the mid-’70s, Dean Paula Brownlee announced with “curricular regret” that the budget could no longer sustain a CHINESE program that served only a handful of enrollees while the engineering departments, their classrooms awash with students, begged for relief. Thus, from the mid-1970s until the mid-1980s the department managed with the base of only three tenure-track faculty members in French, two in German, two in Spanish, and adjunct “fractions” in HEBREW, Italian, and Russian.

The policy of zero faculty growth had to be abandoned in 1986 when Vice President Thomas D’Andrea initiated a reduction of the annual teaching load from seven courses to six, the load at comparable institutions. Spanish grew to three positions and a fraction, French to three and a fraction, and German to two and a fraction. Chinese returned with a full-time

visiting position, and JAPANESE entered the curriculum in 1987 with one tenure-track position. Russian grew to one and a fraction positions. A new program in Asian Studies had helped to justify the appointments in Chinese and Japanese; and Union's association with the Middlebury Consortium, a group of colleges that collaborated in a new undergraduate Soviet exchange, bolstered Russian. A single course in elementary Italian continued to serve the students preparing for the Term Abroad in Florence. The department's limited offerings in modern Hebrew waxed and waned in response to student demand, which is to say mostly in response to political events in the Middle East.

In 1987, when "Gel-time" replaced the fifty-minute classes that had met on Monday, Tuesday, Thursday, and Friday, with three sixty-five minute classes meeting Mondays, Wednesdays, and Fridays, the department instituted a program of language drill sessions conducted by native speaking assistants in French, German, Japanese, and Spanish, and by advanced speakers in some of the other languages.

The new General Education requirement ("GenEd") that took effect for the class entering in 1989, eschewed a conventional language requirement for a language study "incentive" which, its proponents reasoned, would result in a significant gain in the "net" learning of foreign languages by Union students, and better preparation of many students for an increasingly international environment. Rather than being able to satisfy a language requirement by virtue of knowledge gained in high school—knowledge likely to be lost again before graduation from college—students would be attracted, ideally even quite late in their four-year programs, to complete three consecutive courses in a foreign language, instead of satisfying that part of the GenEd requirements by the other options, which required four non-language courses. And (it was reasoned) these students would be the ones most likely to do well as language learners and thus, by simple self-selection, the ones best able to create for themselves a practical *vade mecum*.

Thus Union began the decade of its bicentennial with a new and unconventional approach to foreign language study, an "anti-requirement" designed to foster more real language learning by more students (indeed, as it turned out, generating a seventeen percent increase for the first class to complete its four years with the General Education program). Once again, as the founders had intended, the graduates of Union College moved into their world as much empowered by their liberal arts education as enlightened by it.

Evolution of the programs in Chinese, French, German, Hebrew, Italian, Japanese, and Russian is discussed in more detail in separate articles on those languages.

—Anton Warde

**Mohawk Drama Festival and Institute of the Theatre.** From 1935 through 1940 Union College was the center of a unique theatrical experiment that attracted national and international attention. President DIXON RYAN FOX invited the actor-manager and movie star Charles Coburn and his actress wife, Ivah Wills, who had performed Shakespeare at Union a quarter-century before, to set up a summer festival and institute at the College.

Without Dr. Fox none of this would have come to pass. He loved theatre and as a Columbia undergraduate had played leading roles in college productions and reviewed plays. Later, as a member of the faculty, he came under the influence of the renowned theatrical educator George P. Baker, with whom he collaborated on some historical films. In 1938, Fox wrote a theatrical pageant on eighteenth-century politics, *One people*, and acted in it with a cast of Union faculty and students. The stage-struck Fox was just the man to undertake a program designed to do for the United States what the Malvern and Stratford Festivals were accomplishing for England. Malvern sent over its director, Sir Cedric Hardwicke, and Stratford broadcast its best wishes.

As Fox put it in 1940: "long impressed with the snobbish and pharisaical attitude of old academic institutions toward the theatre...I was interested...in encouraging the arts of acting and production, and in making the public more conscious of the dignity and worth of the theatre as a social institution." To this end he obtained the trustees' permission to invite the Coburns to set up a corporation making use of Union grounds and facilities but totally independent of it operationally and financially. Fox, however, kept the right to approve of the plays selected as well as the publicity.

The festival was not simply another summer theatre. Its uniqueness consisted in the interconnection between the Festival and Institute, both of which were directed by Coburn, who chose the staff of the Institute and appointed a chairman to take charge of its day-to-day operation. The Institute thus became part of a professional theatre. Festival plays, in turn, which often required casts of sixty to eighty, depended upon the Institute's students. As Coburn wrote in the *Bulletin of the Association of American Colleges* (1936), "Union College is the only institution of liberal learning that has invited the cooperation of the professional theatre in a serious and extensive cultural contribution to the production of drama... Union College is a pioneer in this form of education." Dartmouth, Amherst, Brown and others followed Union's lead. After its moderately successful first year, underwritten by a friend of Coburn's, the Carnegie Corporation agreed to a three-year grant of \$12,000, and, in 1938, the Regents of the State of New York granted a charter to the combined Festival and Institute.

During July and August of the first Festival season four plays were presented. Two more were added the following year, and by 1938 seven plays were being presented. The number of performances also increased from five to six a week in the beautiful outdoor theatre seating 1380 near the site of the Achilles Rink. In bad weather, plays were performed amid poor acoustics on an identical set in the gym. The repertory always included a play by Shakespeare, as well as several recent and sometimes new American plays, and others by Moliere, Sheridan, and Shaw. Usually the stars played roles they already knew, for there was only a week to rehearse. The festival attracted the likes of Walter Hampden, Fred Stone, Cornelia Otis Skinner, Frank Craven, and Eugenie Leontovich. Burgess Meredith agreed to play *Hamlet* and bring along a young actor-director, Orson Welles, but he had to cancel. In all, more than 140,000 people from all over the country attended the plays.

Like all high-minded arts projects, despite its artistic achievements it lost money, but less and less until its final season. Reviews of its productions appeared in major newspapers. Such was the Festival's success that by 1937 Coburn contemplated winter tours of festival plays, taking them to colleges and universities. He wrote to Fox of the need for an endowment so that the Festival and Institute might "become a permanent, all-year round institution." Both men dreamed of a 1500 seat three-tier, indoor theatre that would free them from concern about the weather. As Fox put it, "selected students [were given] the opportunity to take subordinate parts in a professional theatre staffed with highly qualified and widely experienced professional directors, actors, stage and costume designers, artisans and illumination experts." For four of its six years, the Institute was chaired by EDWARD L. CARROLL '27, an instructor in the English Department.

Institute courses included theatre production roundtable, theatre production laboratory (preparation of scenes from Festival plays performed by students in Hanna Hall), design seminar, design laboratory, physical conditioning, dancing and fencing, ballet, make-up, theatre management and publicity, and choral music (an hour a week when all sang together). In addition to the stars, teachers and Sunday night speakers included such well-known writers on the theatre as Sheldon Cheney, Barrett Clark, Clayton Hamilton, Elliot Norton, and designer Lee Simonson.

To complete the program of studies took two eight-week summers. The four best graduates were offered contracts with the professional troupe, and a number of others also went on to careers in the theatre. Students were kept busy. Mornings were spent in class, afternoons rehearsing with the Festival company in Jackson's Gardens, and evenings taking part in Festival productions.

Many years later, John Griggs, one of the Festival's minor performers, cast a satirical eye back over the enterprise: "The elegant brochure offered a 'Refined, cultivated atmosphere.... Under the old oaks of Union College, the student is taught acting, stagecraft, eurhythmics.... An added feature is close contact with the acting company of Broadway and Hollywood stars....'

"Practice differed somewhat from promise. Dickens's Wackford Squeers and his Dotheboys Hall could have learned from the Mohawk. Learn stagecraft? Okay—paint the scenery, build the sets. Properties? Scavenge the town. Acting? Extras are needed by the score. Eurhythmics? There is great rhythm at the loading platform. 'Close contact with the acting company...' came under the old oaks by moonlight—if you were young and female."

Several circumstances combined to make the 1940 season the last. Unusually bad weather along with national nervousness about the impending war led to low attendance and the need to ask the guarantors to make up the deficit for the first time. Many of the local backers, Fox reported, "felt that they had been called upon to sustain an enterprise of national significance that was too big for their small-salary purses." Then the government asked the College to take part in an accelerated summer program for training engineers, physicists, chemists, etc. The Festival was postponed and never resumed.

Through the 1940s students and theatre professionals continued to seek entry into the program. In 1946, the *New Yorker* wanted advance notice of plans for the next season. In the mid-sixties, William Meriwether, the Mountebanks' director, prefaced his own proposal for a summer theatre program at Union with a reference to the already legendary Mohawk Drama Festival. It is still a source of inspiration.

—S. O. A. Ullmann

**Morris, John Selwyn** (July 2, 1925–). Sixteenth president of Union College (1979–90).

Born in Rhondda, South Wales, the son of Jenkin Morris, a coal miner, and Hannah Williams Morris, John Morris served with the Royal Air Force, 1943–47, before entering the University College of South Wales and Monmouthshire (BA 1951). He spent an additional year there doing honors work in philosophy, then obtained a second bachelor's and a master's degree in 1953 from Cambridge University.

Ordained a Presbyterian minister in 1954, he married Enid Elry Walters in that year—they would have one son—and emigrated to the United States. He served as a minister in Vernon and Vernon Center, New York (1954–57) while pursuing graduate work in theology at Colgate University (MA 1957). Seeking to exchange the ministry for college teaching, Morris went to New York City for further graduate study,

taking courses at Union Theological Seminary and at Columbia University. In 1960, before receiving his PhD from Columbia (1961), he was appointed a full-time member of the Colgate faculty—he had done some part-time teaching there earlier—and rose to Professor of Philosophy and Religion by 1970 and Colgate Professor of the Humanities in 1971. During his time at Colgate, Morris entered academic administration, initially as Assistant Dean of Faculty (1965–67), chairing the committee that recommended co-education at Colgate, later as Director of the Division of Humanities (1970–72) and of the Division of University Studies (1972–73), then as Provost and Dean of Faculty (1973–79). He served as acting president in 1977.

Union announced Dr. Morris's selection as its sixteenth president on March 15, 1979, the appointment to take effect on August 1, 1979. His immediate predecessor was Acting President NORMAN AUBURN, who served during the search for a successor to President THOMAS BONNER. Bonner had resigned with little notice in June 1978, following a tumultuous and controversial tenure, and the Union community was looking for a peace-making president committed to general education, the liberal arts, and the small private college. Based on his background and experience, Dr. Morris appeared to be just the president the College needed. Formally inaugurated on October 13, 1979, during two days of festivities, Morris spoke in his inaugural address of Union's "peculiar destiny as a liberal arts college with engineering within its bounds," urging that this peculiarity be exploited through cross-disciplinary interchanges among students and faculty.

The administrative style which came to characterize the Morris administration was understated competence combined with an iron hand behind the scenes. When controversy seemed likely to arise, as it inevitably does in an academic community, the president tried to settle differences by private treaty rather than public confrontation; he generally succeeded, especially in the first half of his term, when nearly everyone was tired of controversy. Still, some were surprised to find that the soft-spoken Welshman could be very tough indeed when he felt his principles were being challenged, or when he was dissatisfied with someone's performance. The same man who obtained a promotion to full professor for a terminally-ill faculty member could also summarily dismiss a senior member of his administration. Although he could be abrupt in dealing with individuals, during President Morris's tenure changes in policy or program tended to be more gradual than precipitous, and to have widespread support prior to implementation. Little was overtly forced upon the College community. Nonetheless, many changes did occur.

In the area of CURRICULUM and educational policy, for example, the Liberal Learning program was exam-

ined, found wanting in core requirements, and a new general education curriculum was phased in beginning in the fall of 1989. Although elements of the proposal were initially heavily disputed among the faculty, further committee work at Morris's urging, and the administration's promise of additional faculty to implement the program, resulted in strong faculty support for the final proposal. Similarly, through involvement of appropriate committees and, finally, the faculty at large in general meeting, the GEOLOGY DEPARTMENT was reinstituted in 1985, the EDUCATIONAL STUDIES PROGRAM was begun in 1988, and programs in East Asian Studies, WOMEN'S STUDIES, and Religious Studies were approved in 1989, although the latter was not funded during the period covered by this book. The GOVERNANCE system introduced in 1980, which was under development when President Morris arrived in 1979, strengthened the role of the general faculty rather than leaving important decisions to committees.

During Morris's tenure the reach of Union's TERMS ABROAD program extended to include, among other countries, Japan and China. To encourage undergraduate research, faculty scholarship, and, ultimately, an increase in the number of Union students going on to graduate study, the College obtained a Dana Foundation grant—later supplemented by College funds—to provide summer research opportunities; these included a small stipend, and room and board for individual students working closely with a faculty member. In the fall of 1982 the SLOAN FOUNDATION granted Union \$250,000 to integrate quantitative and technological studies into the liberal arts curriculum. Although the attempt at a Quantitative Freshman Preceptorial Course was short-lived and not very successful, the program called "Computers for Humanities Undergraduate Courses (CHUC), proved more viable and eventually became a computing resource for humanities students. (Indeed, it was during the Morris Administration that the College became systematically computerized, utilizing an all-campus network.) A founding participant in the National Conference on Undergraduate Research, Union hosted the fourth annual NCUR Conference in the spring of 1990. To encourage promising local students to attend Union, President Morris signed a stronger transfer agreement with Schenectady County Community College.

Perhaps the single most important educational policy commitment President Morris made was the decision in the spring of 1987 to discontinue requiring Scholastic Aptitude Test scores of applicants for admission. Encouraged by his academic deans, the Admissions Committee, and the Office of Admissions, who cited the alleged bias in the tests themselves and their failure to predict success in college, Morris agreed to a policy change that drew national attention to

Union. At the time, the president said that claims that the SATs discriminated against women were crucial to his decision. Candidates could still choose to submit their SAT scores, but only certain achievement tests were required for admission beginning with the Class of 1992 (entering fall 1988).

Having himself been a long-time faculty member at Colgate, and continuing to teach at least one course a year (in the philosophy of religion) at Union for much of his presidency, President Morris was perhaps especially sensitive to issues of faculty compensation and working conditions. To attract and encourage promising young faculty members, the College took two steps in 1981, obtaining a \$300,000 MacArthur Foundation grant to endow an assistant professorship that rotates among departments, and introducing a program of "junior sabbaticals" for faculty members who passed their third-year review. The faculty teaching load having stood for many decades at seven courses per year—in later years at best awkwardly fitted into a trimester calendar—the administration reduced the load to six courses in 1985/86. This literally changed the lives of many faculty members, but of course entailed costs for additional faculty, if the student/faculty ratio were to remain stable. In fact, the size of the full-time faculty and the number of adjunct faculty both increased. During the last three years of his administration, President Morris accepted and successfully urged upon the trustees recommendations from the Committee on Faculty for special allocations to raise faculty salaries relative to those of other colleges with which Union compared itself. This program had significant effects on both the salaries and morale of, especially, the senior faculty. Near the end of Morris's term (1989), funds were obtained to support three new faculty chairs: The Roger Thayer Stone Professorship of Sociology and Anthropology; The Thomas J. Watson and Emma Watson Day Professorship of Engineering; and The John and Jane Wold Professorship of Geology (see ENDOWED PROFESSORSHIPS).

College presidents take special pride in their "bricks and mortar" accomplishments, perhaps because of the visibility and relative permanence of the results achieved. President Morris was no exception, although he started slowly in this area. In fact, one of his first moves was an attempt to sell College property, namely, the GIRLING CENTER on Aqueduct Road; it was put on the market in 1982, removed in 1985, and finally sold in January 1990. In April 1981 the renovated admissions and financial aid office in Old Gym was renamed Stanley BECKER HALL after its benefactor. The new lighted, artificial turf athletic field, eventually named Bailey Field, was first used in the fall of 1981 (see ATHLETIC FIELDS). As avid swimmers, both the president and Mrs. Morris had to be pleased by the renovation of ALUMNI GYMNASIUM completed in January 1987, including the addition to it of a state-of-

the-art swimming and diving pool, as well as squash and handball courts.

But the building project Morris judged most important was the renovation of and addition to Carnegie Hall, to be renamed the College Center (and, in 1995, the Reamer CAMPUS CENTER). President Morris saw this building as a symbol for the integrity of the College community, always insisting that it not be called "the student center," but "the college center." With its combination of student and administrative offices, the upperclass dining hall, and the Dutchman's Hollow Pub, as well as the BOOKSTORE and, importantly, the College mail boxes and post office, the College Center has indeed functioned to bring the community together on a daily basis. The necessity of borrowing most of the cost from endowment, however, enforced some regrettable economies; for example: the building was not air-conditioned and lacked the infrastructure to make future air conditioning possible at a reasonable cost, and the bookstore lacked sufficient storage space.

Because the Alumni Gymnasium and College Center projects were nearly simultaneous, for a period of about eighteen months students sometimes—in revealing contrast to the major objects of student protest during the previous administration—complained bitterly at having to make do with temporary alternatives to two facilities important to their extracurricular life.

President Morris's bricks and mortar legacy is a large number of renovations and additions; the only completely new building erected during his administration was the ENGINEERING LABORATORY (1985), made necessary when the addition to the College Center required the demolition of the old engineering shops.

One building that President Morris did not take on, despite occasional mentions of its being considered, was Union's best-known symbol, the NOTT MEMORIAL. Like everyone on campus, the president was concerned about the Nott's deteriorating condition, but he also knew that, given its status as a National Historic Building, it would be a very expensive renovation and restoration project. Having been unable to raise sufficient external funding to pay the entire cost of the Alumni Gymnasium and College Center projects, Morris may have been understandably reluctant to deal with the Nott Memorial.

The College acquired several properties in the GENERAL ELECTRIC REALTY PLOT during the Morris administration, and renovated one of them as a guest house. Morris's position was that these properties should remain single-family residences or possibly be used as administrative offices, but not be converted to student residences.

One of the first and most important obligations incurred by Dr. Morris's acceptance of the call to Union in 1979 was responsibility for a fund-raising campaign to begin in 1980. Called the "Campaign for Union,"

its goal was to raise thirty million dollars by 1985—a doubling of the existing endowment. When this goal had been achieved by the fall of 1983, the target was increased to fifty million dollars, which was reached by the campaign's conclusion in June 1985. At the end of President Morris's tenure, the total endowment stood at ninety million dollars. Obviously, the president and Mrs. Morris, who usually traveled with him and was a favorite of Union graduates, spent a large part of their time extracting good will and dollars from alumni and friends of the College. Not an easy, extemporaneous speaker, President Morris preferred to use prepared texts for alumni events and formal convocations. His fall 1987 opening convocation address, in support of the importance of core courses in western civilization as a central component of liberal education, was excerpted in the *Chronicle of Higher Education*.

In striking contrast to the frequent large, open bar, hard liquor parties of the Bonner era, the Morrises, who were teetotalers, held generally smaller, cookies-and-punch affairs, with alcohol held to a minimum. At holiday time community members were annually invited to the President's House for a "cup of wassail," and a warm greeting. Visitors to Union and members of the faculty were often invited to elegant and cordial dinner parties hosted by Mrs. Morris. The president and his wife clearly enjoyed the perquisites of office, with Mrs. Morris taking an especially active role in efforts to preserve, restore, and add to the College's historical artifacts, furniture and art works, many of which were displayed in the President's House during their residency. Eventually some campus critics saw the Morris presidency as too regal; rumors abounded concerning excessive demands on staff and exorbitant expenditures.

During his tenure at Union, President Morris chaired the Commission of Independent Colleges and Universities of New York State (1985–88) and served on the governor's Advisory Council on Postsecondary Education, the Skidmore College Board of Trustees, and the boards of several Schenectady corporate and not-for-profit institutions, such as Trustco Bank and Sunnyview Rehabilitation Hospital. The president and Mrs. Morris directed the Schenectady County Historical Society's fund-raising drive for a new library building. President Morris was named a Schenectady Patroon in September 1989, and the Schenectady Chamber of Commerce presented the Morrises jointly with the "Scanecta-de Award" for community service in July 1990.

By the late 1980s many in the College community believed that Union was losing its momentum, that there were no new initiatives underway, and that perhaps President Morris had exhausted his usefulness. Just as the faculty had wanted a return to peace and calm when Morris arrived in 1979, in 1989 they want-

ed a greater sense that the College was actively seeking some planned objectives. Moreover, the College bicentennial in 1995, presumed to include a major capital campaign, would require a great deal of energy and effort from the entire community, especially from the president. Although nearing traditional retirement age, Morris himself showed little inclination to retire, so it came as something of a surprise when he announced his resignation at the opening faculty meeting on September 5, 1989, to be effective August 31, 1990. In fact, the president had negotiated a "golden parachute" with the Board of Trustees; as President Emeritus he would be on a year's sabbatical during 1990/91, then spend the succeeding two academic years teaching occasional courses and supervising terms abroad in Japan and China. The trustees awarded President Morris Union's highest honor, the FOUNDERS MEDAL, at his last Commencement, June 17, 1990.

In a retrospective interview published in April 1990, President Morris admitted that he had not "been truly successful in getting conversation across the disciplinary lines" of the sort he saw as desirable in his inaugural address ten years earlier: "We're still struggling with our peculiar destiny." After citing many of the accomplishments mentioned above, the president said he would be "willing to be judged by the consistency of the decisions that have been made in terms of a view of the College," a view of Union as "a confident place, a place that has a sense of its own integrity, a sense of its own being, and a sense of itself as a strong community." This is perhaps a philosopher's somewhat abstract conception of Union College, but viewed in these terms the Morris presidency succeeded.

—Jan K. Ludwig

**Morse, David Sherman** (Sept. 16, 1892–Jan. 9, 1969). Professor of Mathematics, 1918–58.

A native of the Catskill Mountain township of Roxbury, one of three children of Herbert G. Morse, a farmer, and Carrie E. Dean Morse, David Morse did not go immediately from high school to college. Enrolling in New York University at twenty-one, he earned an AB in June 1917 and a PhM four months later, then entered the Harvard University graduate school, which awarded him an AM in June 1918. In the same month he married Nellie L. Ayling.

Morse joined the Union faculty that fall as an instructor in mathematics. He left in 1920 to pursue graduate study at Cornell, and after earning a PhD there (1923) he returned to Union in 1924 as an assistant professor and the first department member with a mathematics doctorate.

CHARLES GARIS chaired the department, but he was also Dean of Students (1919–34) and Dean of the College (1934–47), and Morse apparently had some *de facto* administrative responsibility for the depart-

ment well before his formal appointment as chairman in 1944. In 1952 he became the first holder of the Marie Louise Bailey Chair in Mathematics.

David Morse's career as a mathematician seems to have begun with promise. His paper, "Relative inclusiveness of certain definitions of summability," appeared in the prestigious *American Journal of Mathematics* in October 1923, four months after he earned his PhD. His interest in research apparently declined, however, and he eventually promulgated the idea that research/professional growth took valuable time away from teaching, the main business of colleges like Union. But one former colleague remarked, "He never learned any mathematics after he got his PhD."

Morse is remembered as a good teacher, but one who was very fond of rote memorization, even forcing calculus students to memorize the proof of the Fundamental Theorem of Calculus and regurgitate it on exams.

As chairman, Morse left no doubt who was in charge. He called new faculty members into his office and told them how to teach the Fundamental Theorem of Calculus, an experience new PhD's must have found startling and humiliating. At an end-of-term department meeting, instructors wrote on the blackboard the grades they had just given; anyone who gave too many A's and B's heard about it from the chairman. His control extended beyond the classroom—one former department member recalls an occasion when Morse, on being informed that the hallway water fountain was broken, replied, "I never drink water between meals anyway." As chairman, one former member summed up, he was "a tyrant."

He did not hide his disdain for research. ORIN J. FARRELL, who joined the department in 1931, and Charles J. Standish, who arrived in 1954, maintained research programs, but for the most part, whatever initial promise long-time members of the department showed was frustrated by the conditions—high teaching loads left little time for research—and by Morse's deliberate influence.

His most frequently mentioned personal trait was complete humorlessness. One person who had seen him nearly every day for several years reported that he had never seen Morse smile, let alone laugh.

By reputation dour, inflexible and tyrannical, though also a man of consistent rectitude, Morse exercised a strong influence on the Mathematics Department during his long tenure, and indeed, that influence was felt for several years after his retirement in 1958.

Outside the department, Morse chaired the Division of Science (1943–55) and served PHI BETA KAPPA as president of the Alpha chapter and in several other positions in the Upper Hudson Association and the Middle Atlantic District, culminating with two years in the Phi Beta Kappa Senate, 1944–46.

The Morses, who had no children, occupied the South Colonnade faculty apartment from 1933 to 1935, leaving when Hale House was developed.

—Theodore A. Bick

**Moving-Up Day.** Throughout the nineteenth and early twentieth centuries, student life was imbued with anticipatory nostalgia; students frequently indulged in unabashedly sentimental expressions of their sense that they were rapidly approaching the end of youth. For about seventy years, Union students celebrated their progress through college with an annual spring "moving-up" ceremony. Unrelated to academic achievement, the ceremony marked (and enhanced students' consciousness of) stages in what they recognized as a brief and in some respects idyllic existence.

The earliest mention of "moving-up" at Union appears in 1872, but the custom may have been introduced earlier; similar rites of passage were common at other American colleges.

The ceremony took place during daily chapel, at which students were seated by class, the senior class occupying the frontmost seats. About the beginning of the third term, seniors were excused from further chapel attendance (a concession that was doubtless related to the "senior vacation"—see CALENDAR AND DAILY SCHEDULE). On the day the front seats were no longer needed for seniors, each class moved forward, the juniors taking the former senior seats.

This custom was spoken of in 1882 as extinct, but it must have soon revived; it is known to have been current in 1885. By 1895, the occasion had probably changed from chapel services to the student body meetings held in the chapel. By then, "moving-up" also marked the time at which the *CONCORDIENSIS* and other student organizations (virtually always controlled by seniors) turned over their management to the next class. Changing before the end of the year ensured that the old guard would be available for consultation.

By the beginning of the twentieth century, the moving-up ceremony incorporated College cheers and songs, including the "Alouette song," and painting the Idol white to signify an end to the class scraps (see HAZING AND CLASS FIGHTS). During some periods, beginning in 1901, it was the first occasion of the year on which seniors wore a CAP AND GOWN.

The "Alouette song," sometimes called "alowit" or "allewetter," was a long recital by a soloist, with the student body joining in the chorus. Each member of the senior class was characterized by two or three phrases, in the fashion once common under yearbook pictures; those phrases were fit very roughly into the traditional French-Canadian song "Alouette." No text is known from the early years; the one printed in the *Concordiensis* in 1914 sounds unsingable:



A la Anderson, a la Andy, a la Big Swede, a la good night nurse

A la Baker, a la Jimmy, a la nimble foot, a la star athlete, a la P.C. papers please copy

A la Cote, a la Steamboat Bill, a la goo-goo eyes, a la educating the women

...

As the classes grew bigger and more dispersed among different fraternity houses, the "song" grew longer and more difficult to compose; in some years the writer publicly appealed for help.

In 1903 the moving-up ceremony was reinvigorated when (according to CHARLES WALDRON's description much later in the *Union Alumni Monthly*) class marshall Guy B. Griswold '03

grabbed a Sunday School banner which had been left there by the Unitarian Sunday School...and began to march up and down the aisle. The senior class fell in behind Griswold, moved in a body to seats of the freshman class, and each of the other classes moved into the seats of the class next above them. When the student body meeting was over, the seniors lockstepped about the campus and invaded the recitation halls demanding a bolt [i.e., a cancellation of classes]. The other classes joined the parade which finally marched downtown....

The faculty complained about the disruption, but the *Concordiensis* defended the ceremony itself as

symbolic of the ceaseless motion of life. The seniors move out into the pulsing, throbbing world and make room for another class which moves up, and up, and up—then out as those before them. So on it goes until the final moving up which is not celebrated with cheers and songs but with hushed voice and moist eye.

The following year, the faculty agreed to allocate an hour for Moving-Up Day.

Griswold's impromptu action apparently made Moving-Up Day into a more important College custom than it had been (he is sometimes incorrectly said to have inaugurated it). Other activities were later added to those which had long been a part of the program. By 1910, it was customary for freshman to paint the Idol one last time—by bonfire light, against sophomore opposition—the night before Moving-Up Day; freshmen tossed their beanies into the fire. By 1916, the annual interclass track meet was being scheduled for Moving-Up Day, and the Terrace Council "tapped" new members during the ceremony.

In 1916, the ceremony was described as follows:

All classes will come in as usual, though the seating will be changed. The seniors will take their customary places at the left of the chapel, the juniors will occupy the forward part of the middle section, while the sophomores will take the last six or seven rows of seats, vacated by the juniors. The freshmen are to come down stairs, and occupy the section on the right, leaving the balcony for visitors.

After the regular chapel service and student body meeting,

the seniors will...march around the room singing the '16 class song. The members of the old Terrace Council will drop out of line the first time around, and the juniors will then follow the seniors.... Each time around one of the four men selected for the Terrace Council will be picked. The President of the Council will then give an address to the new men at the close of the procession, after which De Rouville will sing the Alouette song. The two underclasses will then proceed to the Idol, where a permanent truce will be declared, the idol painted white, and the Freshmen will bid goodbye to the green caps.

By that time, for reasons that are obscure, the freshman class did not necessarily physically "move up."

By 1921, JUNIOR WEEK had migrated to the spring and Moving-Up Day came at its culmination, with the result that many students were too tired from all the late night dancing and other activities to attend the ceremony.

The ceremony moved from Old Chapel to Memorial Chapel in 1929. With more space, the students then invited the faculty to attend (students and faculty marching separately to the chapel). Although the students continued to run the event, the addition of the faculty must have at least subtly changed its character.

By the late '30s, the ceremony was losing its place in student life, in part, no doubt, because open sentimentality was no longer fashionable. With the increase in the size of the student body, and the addition in 1937 of the tapping of new members for the Garnet Key Society, the ceremony became too long. The change to a semester system in 1915 left the event no longer anchored to the beginning of the last term, and it drifted to later in the school year until in 1939 it was held on the last day of classes.

Finally in 1940 the functions of Moving-Up Day were dispersed; the "Alouette Song" was moved to Class Day, and the other activities occupied the two final daily assemblies of the year, presided over by the College president. In 1943, with the distinction between classes blurred by accelerated wartime schedules, Moving-Up Day was held for the last time.

**Mozley, Walter Alan** (June 20, 1904–Aug. 1971). Professor of Biology, 1951/52; 1954/55, 1958–69.

Born at Chingford in Greater London, the son of Walter Harrison Mozley (at that time a "company's registrar") and Maude Lewis Mozley, Alan Mozley—as he preferred to be called—emigrated with his family as a child to the vicinity of Winnipeg, Manitoba. That frontier area was then enjoying a boom, and Mozley would much later write about the formative influence of "my having been brought up, from an early age, in contact with diverse people, so that I am used to a condition of intellectual ecotone."

By eighteen he had begun "vague and undisciplined general observations" on the biology of temporary ponds in his vicinity. After entering Wesley College of the University of Manitoba at twenty-one,

he began to concentrate his personal research on one particular pond; the three years he spent studying it, with special attention to snails, later provided the basis for his first two published papers (1928, 1932), and indicated the direction of most of his future work. By the time he graduated in 1928, with a BSc, he had also participated (1925, 1926), under the auspices of the Department of Marine and Fisheries, in a biological reconnaissance of the Maligne Lake area of Jasper National Park, examining lakes to ascertain which were suitable for stocking fish.

After some graduate study at Johns Hopkins University, teaching zoology there (1928/29, 1931/32) and at the University of North Carolina (1929/30), he entered the PhD program at the University of Edinburgh in 1932. Again his study was punctuated by scientific expeditions; during the open seasons of 1932 and 1933, under a Bacon grant from the Smithsonian Institution, he traveled extensively in Siberia and Northern Kazakhstan, studying snails. He traveled alone, except for a Russian boy to tend the horses, and apparently relished the hardships and danger. His work there resulted in *The fresh-water and terrestrial mollusca of northern Asia* (1935).

After earning a PhD from Edinburgh (1934) and being elected to the Royal Society of Edinburgh in that year, he returned to Johns Hopkins (1935) for another brief stint as a lecturer in zoology. In 1936 he published a report on the distribution of mollusks in 315 ponds and small lakes in western Canada, based on investigations in 1924–31.

Much of Mozley's work then shifted from purely taxonomic and ecological studies of snails to investigations intended to contribute to the control of those snails which, by acting as disease carriers, played an important role in major public health problems. He particularly addressed the control of bilharzia (a form of schistosomiasis) in Africa, and liver-fluke disease among sheep and cattle in Great Britain. In 1937 the London School of Hygiene and Tropical Medicine awarded him a Wandsworth grant for two years of study of the biological basis of two forms of schistosomiasis in Tanganyika Territory and Zanzibar Protectorate. In 1940 he earned a DSc from Edinburgh.

He spent the years of the Second World War in Rhodesia, as a civilian scientist working for the British government on means of preventing these parasite diseases through the control of the host snails. From 1946 to 1948, at the behest of the British Ministry of Agriculture and Fisheries, he visited a large number of sites in England, Scotland and Wales, usually on foot, working on means to control liver-fluke snails. He continued that research for another five years at his own expense.

By 1951, he had published about forty papers in scientific journals. The work in Africa and Britain was also reflected in eight books, all but the first two of

them brief handbooks intended to aid local public health officials in controlling dangerous snails: *The fresh-water mollusca of the Tanganyika territory and Zanzibar Protectorate, and their relation to human schistosomiasis* (Transactions of the Royal Society of Edinburgh, 1939); *The control of bilharzia in Southern Rhodesia* (1944); *The snail hosts of bilharzia in Africa; their occurrence and destruction* (1951); *Molluscicides* (1952); *A background for the prevention of bilharzia* (1953); *An introduction to molluscan ecology; distribution and population studies of fresh-water molluscs* (1954); *Sites of infection; unstable areas as sources of parasitic diseases: schistosomiasis and fascioliasis* (1955); *Liver fluke snails in Britain* (1957).

Control of the snails relied heavily on the application of copper sulphate; Mozley also served for several years as a consultant to the British Sulphate of Copper Association, Ltd.

In 1948 he began to oscillate between academic and public health activities. From that year until 1951, he served as professor and chairman of the Department of Biology at the Higher Teachers Training College of the University of Baghdad. During 1951/52, at the invitation of his former University of Manitoba classmate, department chairman LEONARD CLARK, he filled a one-year vacancy at Union. He spent much of 1952–54 in Africa (though "for a short period in 1953, by courtesy of the Canadian Pacific Railway, a petrol-driven trolley (or "speeder") was placed at my disposal, and I was able to make journeys across the Selkirk Range. I found that fresh-water molluscs were not common.")

He returned to Union on another temporary appointment in 1954/55, and again in 1958, at which time he was also engaged in snail control research with biologists at the University of Cincinnati. Until 1962 he held a series of one-year appointments at the College, replacing colleagues on leave, and he even expressed a preference, "on account of my outside interests," not to have tenure. When he began his seventh year, however, with an offer in hand from the University of Libya, the College informed him that "to all intents and purposes" he was now tenured, with the informal understanding, highly unorthodox but entirely agreeable to him, that if he was not needed in any given term he would take an unpaid leave of absence.

He loved travel and outdoor life, and his interests ranged far beyond molluscan ecology, encompassing geography, the survival of humans and animals under unfavorable conditions, and the history of exploration. His field work took him to remote and sometimes dangerous places; he told of a journey on the Trans Siberian Railway during which fellow passengers mysteriously disappeared one by one, and he later wrote of his 1932 travel by horse-cart in that country that it "was a time of great hunger in Siberia. Men on the southern steppe...would kill for food. The usual

method was to cut the throat." He claimed that he was able to fool "the local brigands" by telling the truth about his intended camping spots. "Readers of this account who have known frontier towns," he wrote in another book, "will recognize the parallel between the animal parasites and the tricksters, sharpers and opportunists in human communities on a frontier."

He took almost every opportunity to get away, making—in addition to his major work in Canada, Africa, Britain and the Middle East, briefer scientific surveys in Scandinavia, Anatolia, and Australia. During the Christmas vacation of 1954/55, the College News Bureau was electrified when renowned radio commentator Lowell Thomas interviewed Mozley in mid-air en route to London, Cairo and the Sudan. Mozley told Thomas it was "a routine trip by a scientist doing his job," but the News Bureau considered it a lost opportunity to get in the newspapers, and it requested that faculty with exotic travel plans keep them informed.

In one of his books Mozley lamented

the shortage of [biological researchers] who are willing and able to live out of doors in weather of all kinds, and at the same time have the necessary laboratory training, combined with the essential intellectual endowment. Here is a field well worthy of the attention of able strong men, not easily frightened, who will seek out and tackle difficult problems.

For himself, he seemed to enjoy facing life alone, taking things as they came, and meeting the challenges of a solitary life in the wilderness. During summer vacations from Union, he made protracted solitary treks through the Canadian bush to take annual measurements of certain lakes. Traveling to the general area by train, he arranged with the conductor to let him off, and then to pick him up much later at a designated point on the line some considerable distance away. In the meantime, he lived off the land along with what he could carry. The cereal part of his diet he poured into a pillowcase, taking care not to mix the layers. At meal time he scooped out a sample, never knowing what it would be, enjoying the variety and the unexpected nature of meals prepared in this way.

In Mozley's later books—*Ecological processes* (1959); *Consequences of disturbance; the pest situation examined* (1960); and *Reconnaissance; an approach to exploration* (1965)—he tried to generalize from what he had learned. "What I have to say," he wrote in *Consequences of disturbance*,

may be worthy of the attention of other workers partly because I have been free for years at a time from official routine, and also from much day to day harassment. At the same time I have been closely associated with actual control activity. As a result, I have been able to think in a rather casual way about pest problems, and to wonder. I have not been in a hurry to set down on paper the conclusions I have reached, but now it seems that there is sufficient material to warrant their publication as a basis for discussion.

His last book, *Reconnaissance*, a consideration of strategy in the preliminary attack on a scientific problem, is both his most theoretical and his most personal. It cites non-scientists ranging from Alexander Pope to Ortega y Gasset, Santayana, and Pasternak, with passing reference to a Renoir painting.

Mozley's comings and goings, his quietness and his highly developed British reticence made him a somewhat remote and mysterious person at Union. He lived in rented rooms and did not drive. Long before coming to Schenectady, he had married Isobel Gertrude Goddard, and they had had a child who died in 1943, but although he still described himself as a married man as late as 1967, his wife remained in England and the marriage was generally assumed to have broken down. He never spoke of his personal life and only rarely discussed his professional activity. Even his appreciation of the College came from a unique perspective: "To anyone like myself," he wrote President Davidson in 1960, "who has frequent contact with wilderness on the one hand, and disease-ridden ignorant populations on the other, the situation here at Union is astonishingly constructive. We manage to accomplish something in a rough world."

Some of his students regarded him with awe. His forceful language and strongly British accent and diction, his formal but eccentric dress—he rarely if ever wore an overcoat, however cold the weather—and his beard (the only one on the campus for many years), all led to his being considered "a real college professor." Beneath the stiff exterior, there was wit, an irreverence toward what he considered scientific pomposity, and a graciousness that emerged on occasions such as a memorable formal dinner he gave at the Van Curler Hotel to celebrate his promotion and tenure. For several years he bought the first strawberries to appear in the supermarket each summer, took them to the campus, and shared them with anyone he encountered.

In March 1965, as he looked forward to a sabbatical devoted to work on sub-Arctic mollusks and other organisms, Mozley was hospitalized with hypertension and a stroke. Although he recovered, he felt unable to resume teaching, and he moved to the status of research professor. In 1967 he rented an apartment in Lynden, Washington, to write a book (never published); he spent his last years living with his sister in Canada.

—Raymond Rappaport

—Wayne Somers

**Museum.** The College maintained a museum from some time before 1840 until 1932. Devoted at first largely to minerals, it later also held zoological specimens, antiquities, art reproductions and curiosities.

Museums, or "cabinets" of specimens, were common in American colleges in the nineteenth century, although it is not clear that, with the exception of the

mineral collections, a convincing rationale for their function was ever developed.

In the fall of 1802, when the College was still in the former Schenectady Academy building, the trustees resolved "that a Museum be immediately established and public notice be given that Articles of curiosity will be gratefully received....," but there is no record that a museum was actually established then. In 1806, the board authorized a committee to choose "a keeper of the museum" from among "the permanent officers of the College," and to pay him twenty-five dollars a year. In the summer of 1814, as the College was about to move to the present campus, the trustees again turned their attention to the subject of a museum, authorizing the president to appoint, among others, "a keeper of the Museum when one shall be established."

A "cabinet of natural history," under the supervision of CHESTER AVERILL (who was also the librarian), was receiving gifts of minerals by 1830. Two years later, Averill was "Superintendent of the Mineralogical Cabinet" (and librarian), while BENJAMIN JOSLIN as "Curator of the Union College Museum," was accepting such gifts as "a tablet taken from the old Dutch Church" and "a piece of petrified wood from Chittenango."

The collections were moved in 1840 from South Colonnade back downtown to old West College, where it was installed in "the upper part of the Hall...in which the Library is placed." Two "spacious apartments" were "fitted up," one for the library and the other for the Museum of Natural History, which, although it held specimens in conchology and entomology as well, was sometimes called the Geological Museum.

Chester Averill left the College in 1836, and Joslin departed the following year; by 1842 JONATHAN PEARSON was Keeper of the Museum, an added chore for which he received \$100 a year. An 1843 catalogue listed, among recent conventional donations of minerals and fossils, other items as various as chopsticks, a specimen of continental currency, and "chert from the Garden of Gethsemane." Many well-meaning donors could not distinguish between a scientific collection and the random gatherings of curiosities that made up public museums at that time.

By 1843, the museum was at the rear of West College in a separate 30 by 80-foot brick building sometimes called Geological Hall. The contents—minerals, geological specimens, plants, "anatomical preparations," and other objects—were packed up in the summer of 1854, along with the Library, and put in storage for two years.

The new GEOLOGICAL HALL at the end of South Colonnade took its name from its intended use as a geological museum; when the building was completed in 1856, the stored objects were moved to the top floor,

ultimately to be arrayed in horizontal and vertical display cases or stored in special cabinets.

With the move back to the campus and the acquisition in 1858 of the large and fine Wheatley Mineral Collection, which was given its own room (see WHEATLEY AND PFORDTE MINERAL COLLECTIONS), the museum began to receive more care—and more visitors. For a while, at least, it was open regularly two afternoons a week. Under the provisions of the Wheatley Collection trust deed, an official curator was appointed; the first was Josiah Dwight Whitney, a well-known mining geologist. When Whitney left after a few months, his assistant, an elderly German named C.W.A. Hermann, who had been a New York City mineral dealer, continued the work, affixing prices to the many duplicates the College wished to sell. Hermann found it hard, Pearson remarked in his diary, "to stem the tide of American hurry & excitement," but he found it even harder to survive on \$100 a year for two afternoons a week of work; after he left in 1860 the position became the extra duty of faculty members; in succession, CHARLES CHANDLER; MAURICE PERKINS; HARRISON WEBSTER and JAMES STOLLER.

Later in the century, co-incident with the professorship (1869–83) of Webster, a zoologist, the museum began to acquire more biological specimens, including about five thousand marine invertebrates collected by Webster. In 1878, Webster issued a plea for students to contribute specimens of flora and fauna from their home states.

When the library moved from the balcony of Old Chapel to the NOTT MEMORIAL in 1879, the mineral collections filled the vacated space, leaving the upper room to the other parts of the museum. An 1896 photograph of the upper room shows, in the center of the west wall, a full human skeleton, flanked by a pair of (presumably exotic) snowshoes and two ASSYRIAN TABLETS. Along each side of the room and on the galleries, cases appear to contain natural history specimens. In that year, the museum was reckoned to possess 15,164 zoological specimens (including 10,000 shells), 2,384 geological specimens, 5,000 mineralogical specimens, and an unstated number of botanical specimens.

In 1907, the entire museum moved to the top floor of the Nott Memorial where it joined a collection of plaster casts of classical statuary donated in 1881 by Miss Catharine Lorillard Wolfe. With the move to the Nott Memorial, the museum became still more miscellaneous; to the scientific collections and the plaster statuary were added Eliphalet Nott's three-wheeled carriage, one of the stoves he invented, and, doubtless, other local artifacts.

The top floor of the Nott Memorial, though dim, was said to be better lighted than the Old Chapel gallery. The mineral collections were reclassified by

geological curator Daniel Strobel Martin, but although the museum remained for another twenty-five years, it was not a success. The location was dusty, very cold in winter, and uninviting at all times. Moreover, such museums were becoming obsolete, and taxonomy was losing its central place in many of the sciences. When the library needed the top floor for books in 1932, the museum was broken up: the mineral collections went to the Geology Department (and were long exhibited on the first floor of Geological Hall), the reptiles and fishes went to the Biology Department, and the birds and shells were lent to the Schenectady Public Schools, later becoming a part of the Schenectady Museum.

**Music.** The study of music at Union, as distinct from musical performance (discussed under MUSICAL CONCERTS), can be dated to early 1879, when President ELIPHALET NOTT POTTER, who played the organ by ear and had composed a funeral march on the death of Abraham Lincoln, gave several lectures on music in conjunction with recitals at his house. During the following academic year, he brought in two lecturers on music, but that innovation was short-lived and it would be another forty-six years before President CHARLES ALEXANDER RICHMOND (1909–29)—who had published a volume of original children's songs (words and music), and who had the courage to give recitals of Scottish ballads, accompanying himself on the harp—would appoint Union's first professor of music.

For the 1925 dedication of Memorial Chapel, Richmond invited ELMER TIDMARSH, organist at All Saints Cathedral in Albany, to play the new Casavant organ. Tidmarsh became the College's first music director on January 1, 1926, and taught Union's first music course, "The Appreciation of Music," from that year until his retirement in 1956. Richmond personally established an annual prize for the top student in the course.

Tidmarsh's heavy performance schedule inside and outside the College is described in the article on him; in the classroom he was "to give regular work in the history and criticism of music." In 1933 Union recognized his wide contributions at home and abroad as a choral director and recitalist with an honorary Doctorate of Music. Given his high energy and initiative, rigorous training and devotion to music, a question had to be faced when he retired in 1956: Why had a music program at a liberal arts college not grown beyond a single course and a single textbook over a period of thirty years?

A window on those years is afforded by remarks of President DIXON RYAN FOX, in speeches given in 1935. On the topic "Who is an Artist?," after acknowledging that in the frontier years only an exceptional man could persevere with any artistic pursuit, he commented:

The degree of appreciation given to the artist is one measure of civilization.... He has, by disposition, always and everywhere been a producer rather than a consumer.... If, surrounded by business opportunities, [American men] have felt they had no time to be gentlemen...they have taken pride in making it possible for their wives to be ladies. By a recognized division of interest they have left the grace and the cherishing of beauty to women....

In the light of this past it is [more than interesting] to see the changing attitudes of men reflected in a man's College. Young men have come to see that the fine arts can be as masculine as Michaelangelo, or rather they are not masculine or feminine, only human.

And on the topic "Music and the American Youth," Fox wrote:

Twenty-five years ago the college which had a course in this appreciation [of music] was an exception; today it is the college which has not. Then the Glee Club sang...ditties about the bulldog on the bank and the bullfrog in the pond. Today, to the consternation of some alumni, they sing Bach and Sibelius. Many undergraduate newspapers are carrying columns of sober and often very intelligent music criticism.... Few things are more significant in the tendency of our time.

In 1956 a search committee of concerned faculty resolutely chaired by JOHN BRADBURY looked for a candidate who would be academically qualified to build a stronger music program, and selected as Union's next director of music Edgar Curtis, then conductor and music director of the Albany Symphony Orchestra. Curtis had earned his MusB in 1935 and MA in 1936, both *magna cum laude*, at the University of Edinburgh, where he was a pupil of Sir Donald Tovey; and had pursued graduate studies, as holder of the Bucher and Frazer Travel Fellowships, in Europe with Rudolf Serkin and Fritz Busch, and in the U.S. with Fritz Reiner at the Curtis Institute in Philadelphia, and at Tanglewood with Serge Koussevitzky. He was charged with encouraging students to participate in instrumental groups and with developing a music curriculum. He met with student instrumentalists that spring, and the committee encouraged the new director to regard the orphan status of music as a golden opportunity to take the ball and run.

To offset such heady talk, there were sobering deficiencies: to serve as the only studio-office-classroom, there was only a basement under the Chapel that already doubled as choir robing room and greenroom for visiting concert artists. Promises to convert storage spaces around campus into rudimentary practice cubicles were slow in the keeping, despite perennial harassment of authority by Co-ordinator of Student Activities Sven Peterson. Orphans typically lack wallets: until the creation of the Department of the Arts, the realistic needs of a music program continued to be steadfastly passed over.

But the direction in which to run...was set by the director's conviction that things (and students) would

come together, given a single purpose: to *make* music. (If Dr. Fox overlooked this aspect in stressing appreciation, Union can comfort herself that Harvard for many decades left "Applied Music" to be taught on the fringe of her campus by the Longy School of Music.) CARTER DAVIDSON, president from 1946, gave warm encouragement to the direction now taken.

From the start, the infant curriculum was designed with offerings in beginner composition at its core. The colors and character of an individual instrument would be the lure, and would be demonstrated by inviting a student from one of the performing groups to visit a class, and to return later to give readings of the sketches he had made possible. As the music programs developed, and players (and singers) of wider experience became available, it was hoped that similar live demonstrations in "literature" courses would make students aware that music is, in fact, a *repertoire*, and so deepen their appreciation of how fine a great composition, a great performance, is.

Student response was prompt, growing as the curriculum grew. In 1962 Hugh Allen Wilson, organist and choirmaster at the Glens Falls Presbyterian Church, joined the teaching staff and assumed direction of the Glee Club. By 1966 curricular strength was receiving needed underpinnings: music notation was provided, a brief non-credit course for the many in need; composition, now a sequence of three trimesters, progressed from single line melodies and duets through the elements of four-part writing, combined rhythms and chromatic harmony, to elements of instrumentation, with (always) encouragement of free composition. There were seven music courses, and independent study (in composition and in literature) was available by arrangement with the instructor.

In 1967 President HAROLD C. MARTIN and Provost Theodore Lockwood resolved to bring Art, Music and Drama together as a new ARTS DEPARTMENT, and invited Curtis to be its first chairman. With the creation of the department in 1967/68, students and faculty in these disciplines had opportunities to inter-relate in ways not previously feasible. ARNOLD BITTLEMAN had come in 1966 from Skidmore College to develop the Art program as Artist-in-Residence and Lecturer in the Arts; and the new Department acquired Barry Smith and Charles Steckler from the Yale Graduate School of Drama. In Music, students in composition classes could elect a trimester of drawing with Bittleman, or improvisation with Smith, or stage design with Steckler, and discover how similar are the problems and aims in these three arts.

Studio-and lecture-classrooms, practice cubicles for instrumentalists, and offices were housed for the time being in the former Physics Building (see ARTS BUILDING) at the end of the North Colonnade of Ramée's beautiful campus. While space was cramped, it was a giant step forward for disciplines that, in

Harold Martin's words, had depended on broom closets. (If others thought this was a figure of speech, the chairman knew it for a fact.)

Within the major in the Arts, a student chose Art or Music as his field of concentration; Drama would be a third emphasis when the department had acquired sufficient staffing in that field. Some of the requirements for the major (see the article on the Department of the Arts) remained guidelines, rather than objectives as yet fully attainable, until the faculty could be increased. As a single example, in the field of Music a major was required from 1968 on to be active in at least one of the performing groups, but it was 1972 before the Practicum in Music made available to each student a qualified instrumental teacher.

In 1972/73 ear training became an integral part of the "Introduction to Music" and of the beginner composition courses, and a new sequence, "Keyboard Harmony" I through III was added, designed primarily but not exclusively for music-emphasis Arts majors. The sequence gave elementary competence in the Baroque art of playing (and improvisation) from figured bass, and developed awareness of the relationship of the bass line to each of the higher voices—the same awareness an English choirboy acquires by singing motets. This led to simple score reading and elements of conducting, and (in the third trimester)—through conducting, and being conducted while playing in a team with others at two keyboards—to learning to evoke, in an instrumental rehearsal, definitive playing. Students who had composed music for a play in the theatre could present their own scores without waste of time.

During this growth of the curriculum additional instructors were added, notably Emory Waters, a graduate of Amherst College, solo horn player and composer, who conducted the student orchestra, and taught at Union from 1973 to 1978. On Curtis's retirement from Union in 1979, Mordecai Sheinkman was engaged to teach and conduct the Orchestra. The music offerings were drastically revised. In place of the beginner composition sequence, a sequence of three trimesters of tonal music was substituted, with exercises in the concepts taught in the theory classes of nineteenth-century European conservatories. An extended sequence of prerequisites excluded the student-at-large from composition courses, and severely limited composition courses for music-emphasis Arts majors. Only two literature courses (beyond introduction to music) were offered that year, and the student orchestra disbanded. Happily this narrowing of offerings was reversed a year later when Professor Hilary Tann joined the department. Chamber groups were reformed (and later a College Chamber Orchestra), and a curricular program balancing scholarship with creative challenge was restored.

The decade of the 1980s saw the addition of courses introducing students to music of non-European

cultures; a 1984 concert series emphasized world music, and new courses illustrated contemporary developments. Tom Ross, ethnomusicologist, student of Mbira, had come to Union in 1966; he introduced a course on the music of India and also extended the electronic studio. Students were once again encouraged to study composition and to use student ensembles as laboratories—reassuring omens for the decade leading to the College's 200th birthday.

—Edgar Curtis

**Musical Concerts.** Union's student musical groups, active since at least 1854, gave many concerts on campus; these groups are chronicled in the article STUDENT ORGANIZATIONS: PERFORMING ARTS. The present article discusses non-student concerts on campus.

For many decades, most concerts depended on the patronage of the president and his wife. The earliest known is a "parlour concert and reading" sponsored on February 6, 1879, by Eliphalet Nott's widow, URANIA NOTT, at her house; some students were present by invitation. President ELIPHALET NOTT POTTER's wife, Helen, played the piano; JULIA BENEDICT sang; Lt. Best, the professor of military science, played the violin; "Mr. Pierson" (probably William L. Pearson '68) played the zither; and Professor WENDELL LAMOROUX gave a reading. Three months later the Baseball Association sponsored another concert and reading with some of the same performers.

President CHARLES ALEXANDER RICHMOND's wife, Sarah, took the initiative in organizing the first concerts at Union by distinguished musicians, beginning with a series of three in the winter of 1909/10. In that period even the most famous of America's musicians frequently performed in provincial halls.

The Flonzaley String Quartet, one of the country's first chamber music groups to gain an international reputation, performed at that time in Old Chapel, and returned at least twice. Other performers during Richmond's administration included the Dolmetsch Trio, Efreim Zimbalist, the Adamowski Trio, Alma Gluck (she returned to sing "Home, Sweet Home" at the dedications of Payne Gate and of the Alumni Gymnasium), Ignaz Paderewski (in the gymnasium!), and Julia Culp. The First World War ended the concerts for a while, but Mrs. Richmond revived them in 1925 with a performance by Sophie Breslau of the Metropolitan Opera, followed the next year by violinist Max Rosen, harpsichordist Wanda Landowska and the Russian Symphonic Choir.

President Richmond retired in 1928, and the wife of his successor was more interested in art than in music, but the Civic Music Association sponsored a concert series in 1931, mostly in Memorial Chapel. The following year, trustee WALTER C. BAKER '15 and his wife, May, underwrote the first of several concerts

over a period of years, an appearance by Metropolitan Opera baritone Friedrich Schorr. Ticket sales benefited the student loan fund.

The 1930s also saw several series of "Capehorn concerts" in Memorial Chapel and in the Mountebanks theatre—i.e., records played on a phonograph.

Julius Huehn of the Metropolitan Opera sang in Memorial Chapel on the 1940 spring prom weekend, and the following year President DIXON RYAN FOX launched a series of concerts which succeeded remarkably well in their purpose of raising money for scholarships: the first year's performers included Paul Robeson, Helen Jepson and violinist Albert Spalding. The 1943 schedule included the Trapp Family Choir, Yehudi Menuhin and pianist William Kapell. Walter Baker made a gift of five concerts in 1946/47; these included the Gordon String Quartet. The first College-sponsored jazz concert was held in Memorial Chapel in April 1952.

Since 1953, the SCHENECTADY MUSEUM—UNION COLLEGE CONCERT SERIES, held in Memorial Chapel, has been the principal sponsor of classical music performances.

**National Youth Administration.** A New Deal program created in 1935 as a part of the Works Projects Administration, the NYA provided work for unemployed young people between sixteen and twenty-five, including those who would not otherwise be able to remain in college.

FRANCES TRAVIS, in charge of the program at Union, reported in June 1936 that an average of 133 students a month, or almost sixteen percent of the student body, had earned a total of more than \$13,000 during the past year. Work ranged from manual labor about the College to laboratory computations.

The allotment gradually decreased, to 105 students in 1936/37 and 82 in 1937/38, but the College was still receiving \$10,395 in 1940/41, which may have been the program's last year at Union (it ended nationally in January 1944).

**Newman, John** (Nov. 28, 1813–Jan. 27, 1896). Class of 1838. Professor of Latin, 1852–63.

Born in Amsterdam, N.Y., the son of Elias and Elizabeth Hopkins Newman, John Newman taught in a district school before entering the sophomore class at Union, aged twenty-two, in 1836. He joined Psi Upsilon and was elected to Phi Beta Kappa. On graduating in 1838 he became assistant mathematics and English teacher at the newly-founded Troy Conference Academy in Poultney, Vermont.

The Academy was a coeducational school sponsored by the Methodist Church. Newman was ordained a Methodist clergyman, but he was never pastor of a church; rather, over the next fourteen years he served the school as teacher, vice-principal, principal,