IN MEMORIAM

HYMAN JOSEPH ETTLINGER

Hyman Joseph Ettlinger was born 1 September 1889 to Abraham
Ettlinger and Pearl Shucart Ettlinger in St. Louis. He was the second child in a family of six children, two girls and four boys. Except for a brief period of eighteen months when the family lived in Chicago, St. Louis was the Ettlinger home. Young H. J. attended the public schools.

When he graduated from high school he was awarded a four-year fellowship to Washington University in St. Louis (but he finished his B.A. in three years). At Washington University he was a member of the debate team and he participated in the varsity football, basketball and baseball programs. Many people have heard Professor Ettlinger extol the football and other athletic programs at The University of Texas. Rarely did he speak of his personal athletic accomplishments -- All-American honors in football, for one. In those early days basketball scores were low, and one year the Washington University team beat the University of Missouri team by a score of something like 24 to 16. Ettlinger personally scored more points than the entire Missouri team in that game, yet he seldom bragged of this athletic accomplishment.

From 1910 to 1913 young Ettlinger was in graduate school at Harvard University, majoring in Mathematics. William Henry Roever of the Washington University mathematics faculty had secured a Harvard Club of St. Louis Scholarship for him.

At Harvard Ettlinger studied under George David Birkhoff, Maxime Bôcher, Julian Lowell Coolidge, Edward Vermilye Huntington, and William Fogg Osgood. Perhaps nowadays this listing invites no special comment, but in the first quarter of the twentieth century this listing was tops in American mathematics and stood very high in international mathematics. How could Ettlinger help but become a mathematician after studying and working with such a group?

In 1913 Ettlinger joined the Department of Applied Mathematics faculty here at U.T. and began a fifty-six year teaching career and a seventy-three year association. He later changed to the Department of Pure Mathematics and in 1953 when the two departments were combined he had the title of Professor of Mathematics. In 1960 this title was changed to Professor of Mathematics, Modified Service, since he wasn't ready for retirement. Finally in 1969 he was named Emeritus Professor of Mathematics. He lived on until 8 June 1986, still exhibiting a keen interest in mathematics, an undiminished interest in college sports despite the fact that he had begun to think of it as too professionalized, and a careful student and watcher of contemporary social, religious, and financial affairs.

At Harvard, as a graduate student, Ettlinger had been very interested in Jewish movements, particularly the Menorah Society. In St. Louis he had attended a Jewish school and he had learned to read Hebrew. When he came to Austin in 1913 the city's population was 25,000, the University's enrollment was 1600, and 30 of these were Jewish students.

Ettlinger became the Secretary of Congregation Beth Israel shortly after he became a member. After a quarter of a century of service he was elected President. Once, when the Congregation had no rabbi, he performed many of the rabbinical duties. For a decade or so he served as a circuit rider, going out every fall to small Jewish communities in Texas to conduct High Holy Day services.

Back in 1913 he had helped organize a Menorah Society for U.T.'s Jewish students. For many years he was closely associated with the local Hillel Foundation; he frequently served on committees which raised scholarship funds, evaluated records of applicants for fellowship or scholarship awards, and placed students in short term employment. He was the chairman of a fund raising committee to provide a home for the local Hillel Foundation. This is commemorated by a photograph and a plaque in the building that resulted.

Yet Ettlinger's interests were not narrowly Jewish. He was a strong supporter of the National Conference of Christians and Jews. At a time when there were only two offices of that group (New York and Chicago) Dr. Ettlinger was a member of a small group instrumental in getting a divisional office in Dallas. There are now more than eighty such offices in

the United States. Later, a divisional office was established in San Antonio. Professor Ettlinger was co-chairman of the Austin chapter for over twenty years. He was a member of the National Board of Directors of the National Conference of Christians and Jews in the decade after World War II, and he attended the annual board meetings in Washington, D.C. during his period of service. He was a member of the National Executive Committee and a member of the Commission on Education Organization of this group.

In 1914 Miss Rosebud Segal entered The University of Texas. Shortly after her graduation in 1918 she and Hyman Joseph Ettlinger were married. The Ettlingers had two children, Yetta Pauline Ettlinger who died at the age of two years, and Martin Grossman Ettlinger. Martin wrote a Master's Thesis in mathematics under the direction of his father's friend and colleague R. L. Moore, but turned to chemistry for his doctorate. He is now (1986) Associate Professor of Chemistry at the University of Copenhagen in Denmark.

Back in 1910 when Dr. Ettlinger had graduated from Washington University, that school had no Phi Beta Kappa chapter. When they did get a chapter in 1911, they elected some members from previous years; one of these members was Hyman Joseph Ettlinger. Rosebud Segal was elected by Alpha of Texas chapter at U.T. late in her junior year, and son Martin was elected when he was at U.T. Thus, all surviving family members were Phi Beta Kappa members.

In his professional activities, Professor Ettlinger found time for many groups and many projects. He was a charter member of the Mathematical Association of America (organized in 1915); there were only a very few charter members still alive in 1986. Dr. Ettlinger served the Texas Section of the M.A.A. in several capacities over the years. At one time he organized the Grass Roots Educational League when he thought professional educators had taken the wrong direction in college preparation. When the M.A.A. and the Society of Actuaries sponsored the High School Mathematics Program, he served as State Director of their annual contest for high school students. For about ten summers he directed a special summer program for gifted high school juniors, sponsored by the National Science Foundation, officially called the National Science Foundation

Secondary Science Training Program in Mathematics for High Ability Secondary School Students. In 1940 Dr. Ettlinger became a member of the Philosophical Society of Texas.

Somewhere in this list of groups, mention should be made that Professor Ettlinger was the Foreman of the Travis County Grand Jury for a term. In 1934 he was one of the original members of the First Federal Savings and Loan Association (of Austin) and he served as a director and/or emeritus director of that association for over fifty years. This committee is well aware that if a real search had been made of public services performed by Professor Ettlinger, an extensive list would have been needed to include them all.

At The University of Texas he taught some undergraduate courses, including the beginning course in calculus (for which he and his colleague Milton Brockett Porter had written a textbook). He was a pioneer supporter for the Plan II program for the B.A. degree, and for many years he taught a freshman level course in Number Analysis for Plan II students. In 1959 he received a Teaching Excellence Award from the Students' Association.

One of Professor Ettlinger's Ph.D. candidates recalls that it wasn't safe to be seen loitering in the halls. Professor Ettlinger would impress such a person in some useful work, i.e., useful work in one of his projects. Perhaps such a person would evaluate applicants for the summer NSF program, or send out a mailing to the high schools in the state suggesting that they enroll their pupils in the annual high school contest, or send out a solicitation letter for some funds. One graduate student, a Catholic nun, after being impressed into service said: "I wonder what the Mother Superior would say if she knew that I was stuffing envelopes soliciting contributions for a Jewish scholarship fund?"

Over the years he wrote over twenty technical papers, a number of book reviews, and co-authored some technical reports for The University of Texas Defense Research Laboratory, as well as co-authoring two text books. A listing of these is given in an appendix.

He supervised the dissertations of twenty-two doctoral graduate students (in addition to serving on the committees of many others). He directed the master's thesis of at least 105 students (again, serving on

many other committees as a second or third reader). A listing of the doctoral students is given in an appendix.

Professor Ettlinger had returned to Harvard in the summers of 1919 and 1920 to complete his doctoral degree. His mathematical specialty was on the solutions of systems of differential equations. He had begun work on a dissertation under Professor Maxime Bôcher, but Bôcher died in 1917 and he completed the dissertation under George David Birkhoff. In particular, Ettlinger was interested in Sturmian Theory for Ordinary Differential Equations. His colleague Milton Brockett Porter had worked with the finite difference analogue to Sturmian differential equations. Bôcher and Birkhoff had made contributions in the first two decades of the twentieth century. Professor Ettlinger had made his contributions mostly in the third decade. However, many of his graduate students worked in this area. In particular, William Thomas Reid authored a book, Sturmian Theory for Ordinary Differential Equations, 1980. Professor Reid dedicated this 559 page monograph to "Dr. Hyman J. Ettlinger, Inspiring Teacher, Who Introduced the Author as a Graduate Student to the Wonderful World of Differential Equations." This book, among other things, summarized the developments in Sturmian Theory in the period 1930 to 1980, after Professor Ettlinger's research had turned to other topics. As is the case with many creative mathematicians, a period of creativity is followed by a period in which graduate students are trained. Thus, there is often a reduction in the number of papers written and an increase in the number of Ph.D. degrees conferred.

Hyman Joseph Ettlinger was a great athlete. In addition to his participation as a student athlete (already noted), he regularly played handball and swam until late in life. He was an assistant coach to the varsity football team in 1917, he was the director of Intercollegiate Athletics back in 1928-1930. For years he was an official at the spring Texas Relays and at the spring Interscholastic League track meets. During the football season he refereed or otherwise officiated at many games (university, college, or high school).

He was a charter and life member of the Southwest Conference Football Officials Association. In 1973 he was elected to the Longhorn Hall of Honor. A typical Friday in the fall would find Professor Ettlinger rising at an early hour, driving a hundred miles or so to the scene of action. On arrival, he would report in at the local school. Here, he might address the school assembly, or perhaps one or two mathematics classes. At noon time he might attend the noon luncheon of a service club, and address them, pleading for stronger support of mathematics or of scientific endeavors. At game time, he would fearlessly enforce the rules and call all infractions as he saw them. He would then drive home, having enjoyed all the day's events. The reader may ask "Where did he get the energy for all these activities?" This committee can only say that Ettlinger in his prime seemed to have limitless energy and that he thrived on projects requiring energy.

For many years, the U.T. Registrar would urge a faculty member "to allow no one in your class who does not have an official enrollment or add card." A story (reported by a former student who wouldn't guarantee its truthfulness) relates that one day Professor Ettlinger's class was interrupted by a fully armed Texas Ranger who had a warrant for some member of the class then in session. Dr. Ettlinger made the Ranger wait until the end of the class period, since he couldn't admit the Ranger to a class session, and then when the student was arrested at the end of the class, Ettlinger accompanied him to Ranger Headquarters and secured his release. (The story doesn't say whether bail or personal recognizance was required.)

In his retirement years Professor Ettlinger continued his service to the University. In particular he funded three projects. The first was the preparation of what has been called the U.T. Mathematical Family Tree. An effort was made to list all the recipients of Ph.D. degrees in mathematics at U.T. by supervising professor, and follow that with all the Ph.D. degrees granted by each such graduate (whether at U.T. or elsewhere), this group being mathematical grandchildren, and then mathematical great-grandchildren, and so on. This extensive tabulation was stored in a computer memory bank.

A second such project was the funding of the Richard T. Fleming Writings Collection award. Mr. Fleming had collected books and monographs authored by U.T. graduates and faculty while he was living in

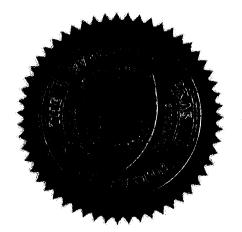
New York City. Upon his retirement he offered this collection to the University, and then served as a voluntary curator for a number of years. During this time he saw the collection grow in size and scope. After Mr. Fleming's death in 1973, Professor Ettlinger authorized the funding of the Richard T. Fleming Book Award. U.T. faculty members and U.T. graduates were eligible for consideration if they had written and published an "item" between 1 January 1974 and 30 June 1975 and placed a copy in the Fleming Collection. The prize was for \$1,000, and a special committee selected John Edward Weems of Waco for his book To Conquer a Peace: The War Between the United States and Mexico as the awardee.

A third such project was the R. L. Moore - H. S. Wall Mathematical Prize, named after two colleagues of Professor Ettlinger. The period of eligibility was 1 January 1970 to 30 June 1975 and required a book or research paper in mathematics by a U.T. student or graduate or faculty member. A distinguished panel of judges selected the awardee. The prize was \$3,000 and was awarded to Professor William Eaton of U.T. at a special breakfast in San Antonio, Texas, on 24 January 1976. The American Mathematical Society and the Mathematical Association of America were holding a joint meeting there, and a good crowd of U.T. Ex-Students was present. In particular, Professor Edmond Burgess of the University of Utah was there. He had received his Ph.D. degree from Professor R. L. Moore at U.T. in 1951 and he was the supervising professor of Eaton's dissertation at Utah, so Eaton was a mathematical grandson of R. L. Moore as well as being a U.T. faculty member.

In 1979 about the time of his 90th birthdate anniversary, four birthday celebrations were held for Professor Ettlinger. In chronological order, there were (1) a breakfast party at Temple Beth Israel, (2) a party at the Ettlinger home, (3) a party given by the Directors of the First Federal Savings and Loan Association of Austin and (4) an afternoon reception and party given by the Department of Mathematics. At the last mentioned party the guests included people from the U..T. Building Custodians to the U.T. System Chancellor, from U.T. athletic trainers to U.T. professors, and a host of ex-students.

He lived on for nearly seven years after this round of parties. For the most part they were years of decline. His mind remained clear

despite increasing physical handicaps. He was very hard of hearing at the time of his retirement. He became half-blind due to retinal detachment following a cataract operation. But he read books, either ordinary or talking, voraciously. He followed sports in newspaper, radio, and television. But he refused to passively accept things -- he read several journals regularly. He was furnished with voice recordings of other journals. He survived the loss of his left foot due to gangrene, and the additional loss of a toe on his right foot. He underwent therapy in an effort to walk with his artificial foot, but the therapy was only partially successful. He lived in his bed and in his wheel chair. He welcomed letters and visits from former pupils and friends through the years and seemed to have an unusual faculty for remembering them. Finally, a recurrence of cancer in the carotid artery area hit him early in 1986 and, rather strangely, he seemed to lose the desire to live. He died on 8 June 1986. Who among us, who are left, can expect to live so long, so vigorously, accepting triumphs and defeats as they come?



William H. Cunningham, President of The University of Texas at Austin

H. Paul Kelley, Secretary

The General Faculty

This Memorial Resolution was prepared by a special committee consisting of Professors Robert E. Greenwood, Chairman; John Durbin; William T. Guy; and Ervin Prouse.