

Sturla Einarsson, 1879-1974

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When Sturla Einarsson passed away on March 25, 1974, at the age of 94, the Astronomical Society of the Pacific lost one of its most devoted supporters. A member for almost seventy years, he served a term as President in 1934-35 and guided the activities of the Society as Secretary-Treasurer from 1950-65; but his interest in the welfare of the Society far transcended these activities. It can be fairly said that for two decades through the 50's and 60's his guidance was the essential ingredient in the Society's steady growth and current health.

Born in Iceland on December 15, 1879, his parents moved to Duluth, Minnesota in 1884. After a boyhood in Duluth, he attended the University of Minnesota, earning his AB with the class of 1905. He immediately migrated to California, where he came under the influences of the legendary A.O. Leuschner at Berkeley, under whose guidance he earned his Ph.D. in 1913. The faculty committee appointed to pass on his dissertation reads like the "who's who" of Northern California Astronomy at the turn of the century; including

Leuschner, Russell Tracy Crawford, and W.W. Campbell. His dissertation topic "On the Orbits of Minor Planets (624) Hector and (588) Achilles of the Trojan Group" was a fine example of the research activity under Leuschner that was giving Berkeley a solid reputation as a pioneer in positional astronomy.

Einarsson's entire academic career was centered at Berkeley. He was a student assistant from 1905-10, becoming an instructor in 1910, an assistant professor in 1918, an associate professor in 1920, and a professor in 1928. He retired in 1950, but maintained his interest in the department of astronomy until failing health during his last years curtailed his daily presence at his desk. His expertise in the field of positional astronomy led

to service as an instructor in navigation during both world wars. In 1917-18 he was in charge of instruction at the United States Shipping Board Navigation School in San Francisco and the Commissioned Officers Training School of the United States Navy. During World War II he was similarly deeply involved in navigation courses at Berkeley for the Navy, through which he attracted the attention and friendship of the late Admiral Nimitz.

From 1946 to 1950 Sturla Einarsson served as chairman of the Department of Astronomy at Berkeley. Under his direction astronomy at Berkeley underwent a dramatic change of emphasis and a revival that persists to this day. He brought Louis Henyey

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to astronomy. Class structure is really a statement about the values held by the professor because his approach to a class tends to reinforce behaviors that the instructor values in students. In many cases that value appears as "knowledge of the material" without a personal confrontation of the companion question "to what end?"

What do I hope to accomplish by maximizing student decision making in my courses? First, it makes clear my feeling that students are responsible for their own education. It is for the students to bring to bear the necessary enthusiasm and energy to affect learning and no one else can do that for them. No one has yet devised a technique to *make* another person learn.

The second objective is to induce students to be more critical of exactly what they do to advance their education. Specifically, I have in mind those things which are usually done automatically because they are required. I *want* students to ask themselves—"Should I go to class today or is there a better way I can spend my time?" I want students to question the value to them of reading a book, of looking through a telescope, of going on a field trip.

A third objective is that I want students to internalize the locus of responsibility for their actions. This idea is simply illustrated by an example from the English language. In describing to someone else an action I intend to take in the future, we frequently make use of one of two constructions: either "I have to..." or "I want to..." Often we use the former to locate responsibility for the action in an external agent. The list of things that human beings really have to do is quite short and includes things such as obtaining enough air and food to continue to operate. Do we *have* to pay income tax? Not really, we just pay because we *want* to avoid the consequences of not paying. The same thing can be said about the student who *has* to spend the evening studying at the library. This is not a semantic quibble. I feel such phraseology is truly indicative of a person's outlook on life, and I submit that one of the most desirable outcomes of an education is that students learn to take responsibility for their own actions.

An educator can profitably spend some time reflecting upon and ordering his priorities. Is the *primary* goal to teach astronomy or to teach people? These are not mutually exclusive, but one must outrank the other. It took me about three years of teaching to decide that people come first. I hope this article encourages people teaching astronomy or whatever to try some of the things I tried—probably with the same misgivings I had—and see how it feels.

In the next issue of Mercury, Dietz concludes his article with a discussion on concrete examples of his approach, specific classroom activities, the role of questions, tests, and grades and the real and illusionary difficulties in putting his philosophy into practice.

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Obituary

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out from Yerkes Observatory in 1947 to develop the department's capabilities in theoretical astrophysics, and Otto Struve in 1950 to do the same in the field of stellar and interstellar spectroscopy. This spirit of diversity of interests initiated by Einarsson has continued, with the establishment of the Radio astronomy laboratory, interest in X-ray and infrared astronomy, and theoretical research in interstellar matter.

Sturla Einarsson was married twice. He married his first wife in 1914. They had two daughters, Margaret Dechant of San Pablo and Elizabeth Cook of Tucson, Arizona; two sons, Alfred and John Einarsson of Los Gatos; six grandchildren and one great-grandchild. His first wife died in 1940. In 1946 he married Thea, who survives him and continues to live in their very comfortable home overlooking Santa Barbara Street in Berkeley.

While Sturla Einarsson made significant research contributions on the orbits of comets and asteroids, he will be remembered by generations of

Berkeley students as a dedicated teacher. His personal interest in their welfare and careers was legendary. During his entire career at Berkeley he was immersed in University affairs, serving on innumerable faculty and university committees and boards during the Sproul heyday when the University of California was undergoing its explosive growth. During his later years he was viewed as one of the Campus' elder statesmen, serving, among functions, as Secretary-Treasurer of the Faculty Club over a period of 29 years (1929-58).

REQUEST FOR ASTRONOMY & SPACE SCIENCE COURSE SYLLABUSES

The Task Group on Education in Astronomy (TGEA) of the American Astronomical Society is requesting course outlines or syllabuses from astronomy or space science courses intended primarily for non-physical science majors. This information is desired so that it can be compiled and made available to educators interested in developing, updating, or expanding astronomy course offerings. If you or your department has an effective astronomy or space science course or program for nonastronomers, the TGEA would like to obtain a copy of your syllabus or course outline. Information on courses or programs that go beyond the usual one semester of general astronomy or which approach the subject in a unique manner is of particularly strong interest.

A preliminary set of outlines (including courses on general astronomy, space exploration, cosmology, extraterrestrial life, astrophotography, and other topics) is currently available for \$1.50. Send syllabuses, orders for the current set (check payable to the American Astronomical Society), or requests for information to:

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