Bulletin of the AAS • Vol. 53, Issue 2

Robert Horace Baker (1883–1964)

Michael Svec¹

¹**Furman University**

Published on: Jul 23, 2021

DOI: 10.3847/25c2cfef.f3834e5b

License: [Creative Commons Attribution 4.0 International License \(CC-BY 4.0\)](https://creativecommons.org/licenses/by/4.0/)

**Robert Horace Baker died on
Tuesday the 23rd of June, 1964.**

Robert Horace Baker, noted author and retired chair of the University of Illinois Astronomy Department, died in Upland, California, after a long period of declining health. Baker's research interests included galactic structure, extragalactic nebulae cataloging, and variable-star measurements. He is best remembered for his classic textbooks *Astronomy* and *An Introduction to Astronomy* published by Van Nostrand.

Born in Northampton, Massachusetts, to Horace Hall Baker and Ellen H. Puffer, he graduated from Amherst College with an A.B. in 1904 and an A.M. in 1905. Robert married Rose Koenig (1885-1925) of Goldendale, Washington, in 1911 and they had three children: Ralph C. (1912-1988), Ruth Elizabeth Hokenstad (1914-2005) and Raymond (1921-1921). Rose died suddenly of pneumonia in 1925. Robert then married Mary Howe (1901-1964) in 1926 and had one son, Robert Howe Baker (1927-1983). Mary Howe was the daughter of Louis McHenry Howe, secretary and advisor to President Franklin Roosevelt. She was a graduate of Vassar College and met Robert when she was an assistant at Lick Observatory. His final marriage was to Hildred Virginia Hogan shortly after his retirement in 1952.

Baker completed his graduate work in astronomy at the University of Pittsburgh, where he was a research assistant at Allegheny Observatory. He worked under Frank Schlesinger (1871-1943) on spectroscopic and visual binaries. After graduating from Pittsburgh in 1910, he served as an assistant professor at Brown University until 1911, when he accepted a position at the University of Missouri Law Observatory, where he continued to study variable stars.

*Photo courtesy of the University of
Illinois Astronomy Department*

From Missouri, he accepted the directorship of the University of Illinois Observatory beginning in 1923, after completing a Martin Kellogg Fellowship at Lick Observatory. During his year at Lick, he used an early photoelectric photometer based on the one by his Illinois predecessor, Joel Stebbins (1878-1966). During his tenure at the University of Illinois, Baker also served as a Research Associate of Harvard University, first in 1931, then again in 1938. His research focused shifted from variable stars and photoelectric photometry to the Milky Way and galactic structure, working with Bart Bok (1906-1983) as one of his “star counters.” Baker retired from the University of Illinois in 1951, after serving as an Assistant Dean of the Graduate College.

Baker’s students from Missouri included Edith Eleanor Cummings (Taylor) (1894-1979). His Illinois students included mathematics doctoral students Elaine Vivian Nantkes (1919-2008), Lois Kiefer (Pedigo) (1915-2009), Ralph Lowell Calvert, and undergraduates [David Heeschen](#) (1926-2012), and [Allan Sandage](#) (1926-2010). Sandage remembered Baker: “He taught me observational techniques. Had I not had these experiences in real research as a junior and senior — and I was happy beyond words in this work — if I hadn’t been taught these techniques by Baker, I would not have reached Caltech with the experience that came to be crucial in later being sent up to the Mount Wilson offices and becoming Hubble’s assistant at the age of 24.”

As an author, Baker’s work enjoyed great success. This first textbook, *Astronomy*, was published in 1930 and went through 13 editions. It was followed by *An Introduction to Astronomy* in 1934 which went through 7 editions. These textbooks dominated the market and were considered classics by which other astronomy textbooks would be judged. He also wrote a number of popular astronomy books including *The Universe Unfolding: The story of man’s increasing comprehension of the universe around him* in 1932 as part of the Century of Progress series, *When the Stars Come Out* in 1934, and *Introducing the Constellations* in 1937. He joined Herbert Zim (1909-1994) in 1951 to publish *Stars: A Guide to the Heavens* as part of Zim’s Golden series of nature books. *Stars* has been updated and published by St. Martin’s Press as recently as 2001.

Baker was a member of the American Astronomical Society, the American Association for the Advancement of Science, the American Physical Society, the Royal Astronomical Society, and Sigma Xi. He was awarded an honorary D.Sc. by Oglethorpe University in 1936.

Ray Langebartel (1921-2011), one of Baker’s colleagues in the University of Illinois Mathematics Department, remembered that Baker “was an exceptionally fine observer and possessed the added talent of clarity of style that made his articles models of

scholarly writing.” He also noted that Baker was very proud of his books and kept them current even after his retirement (interview, Sept 27, 1988).

References

Interview of Allan Sandage by Alan Lightman on 1989 January 11, Niels Bohr Library & Archives, American Institute of Physics, College Park, MD USA.

www.aip.org/history-programs/niels-bohr-library/oral-histories/33964

Obituary: Dr. Robert Baker, Author, Astronomer Dies at 81. (23 June 1964). *Progress Bulletin*. Pomona CA.

Svec, M. (2018). The many transformations of the University of Illinois Observatory annex. *Journal of Astronomical History and Heritage*. 21 (1) 81-93. ISSN 1440-2807. National Astronomical Research Institute of Thailand. On-line:

<http://www.narit.or.th/en/files/2018JAHHvol21/2018JAHH...21...81S.pdf>

White R.E. (2007) Bok, Bart Jan. In: Hockey T. et al. (eds) *The Biographical Encyclopedia of Astronomers*. Springer, New York, NY. https://doi.org/10.1007/978-0-387-30400-7_178 .