

In Memoriam
John P. Britton (1939–2010)



John Phillips Britton died of cardiac arrest at his home on 8 June 2010 at the age of 71 years. Born in Hartford, Connecticut, Britton was educated at St. Paul's School and Yale University. At Yale, Britton studied for a Ph.D. in the Department of History of Science and Medicine under the supervision of Asger Aaboe and Bernard R. Goldstein, graduating in 1966 with a thesis on the quality of Ptolemy's solar and lunar observations and parameters. That year Britton joined the investment management firm Conning & Company, where he would eventually become partner. He later founded the asset management firm CF Management. Britton never lost interest in the history of science and by the early 1990s he was able to return to the study of ancient astronomy and mathematics more or less full time. As an independent scholar, Britton maintained close links with his former supervisor and close friend Asger Aaboe at Yale and colleagues and students at the Insti-

tute for the Study of the Ancient World at New York University and the former Department of the History of Mathematics at Brown University, and twice held research fellowships at Yale University and the Dibner Institute for the History of Science and Technology.

Britton's research for his Ph.D. was initially directed towards a study of the late 19th and early 20th century American astronomer Simon Newcomb. Through Newcomb's work on the secular acceleration of the moon, Britton was quickly drawn to the ancient astronomical records that had been used by Newcomb to determine the gradual change in the moon's mean motion, and his dissertation (eventually published in 1992 as *Models and Precision: The Quality of Ptolemy's Observations and Parameters* by Garland Publishing) placed Britton firmly in the realm of the history of ancient astronomy.

Under the guidance of Asger Aaboe, Britton also studied ancient Babylonian astronomy and mathematics, and it was in this field where he would make his major contributions to the history of science. Beginning in the late 1980s, Britton undertook a series of detailed studies of Babylonian lunar theory. Much of this work was focused upon understanding the structure of the so-called column Φ , the second column in a standard System A lunar ephemeris. The mathematical rules underlying column Φ and its link with other System A lunar functions were set out by Otto Neugebauer in the 1950s, and subsequently refined by Asger Aaboe in the 1960s and 1970s who also demonstrated that its physical meaning was as a representation of the variable length of 223 synodic months on the assumption that the solar velocity was constant at 30° per month. In a series of papers published from 1987 to shortly before his death, Britton examined the subtleties within the apparently simple mathematical function underlying column Φ and proposed a reconstruction of how it might have been derived from the observations made by Babylonian astronomers in the mid-first millennium BC. Britton also reconstructed the origin of the functions for eclipse magnitude within Babylonian lunar theory.

In addition to Britton's work on lunar theory, he also published studies of other aspects of Babylonian astronomy including early observations of Mars, methods of using the Saros to predict eclipses, the development of intercalation practices within the lunar calendar, and planetary theories. His interests were not restricted to astronomy, however, and he also published an important study of Late Babylonian mathematical tablets. At the time of his death, Britton had just finished a study of the famous Plimpton mathematical tablet in collaboration with Christine Proust and Steve Shnider, which will appear in print very shortly.

Britton's work on Babylonian mathematics and astronomy are characterized by detailed mathematical analysis and reconstruction. Britton had a unique ability to see patterns in tables of numbers in the same way as the Babylonian astronomers. As a result he spotted many important pieces of evidence contained within the structure of Babylonian astronomical tables that had been missed in previous studies of these texts. I think it is no exaggeration to say that Britton came closer to understanding Babylonian mathematical astronomy on Babylonian terms than anyone since the end of cuneiform writing almost two thousand years ago. That at times he found it difficult to explain that understanding to others does not take away from the brilliance of his work: as with the Babylonian tablets themselves, scholars will keep finding more and more information tucked away within Britton's papers each time they are read.

In addition to his own research and publications, Britton actively fostered the work of others on Babylonian astronomy. He frequently read works of mine in draft, always sending detailed and penetrating comments and suggestions, often appending the details of follow-up work he had done on the topic himself. In 2003 Britton organized a workshop on Babylonian astronomy held to celebrate Asger Aaboe's 80th birthday which formed the model for the so-called 'Regensburg' series of workshops on Babylonian astronomy which have been held every 3 years or so over the past decade and have led to the publication of several highly significant technical studies of Babylonian math-

ematical and goal-year astronomy. These meetings will continue, but Britton's absence will be sorely felt by the participants.

John Steele
*Department of Egyptology and Ancient Western Asian Studies,
Brown University, Box 1899, Providence, RI 02912, USA
E-mail address: john_steele@brown.edu*

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