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# Foreword: An Essay in Story Form, Honoring Babylonian Astronomers and Connecting Them with Scholars Who Study the Tablets Today

Once, long ago, in a land where the night sky blazed with stories, a young boy struggled to learn the secrets of the stars. Oh, he knew Leo the lion and Pisces the fish and that he had been born under the sign of Taurus the bull, but he wanted to know all the signs and the stars and their travels.

His father and grandfather before him had written and studied the royal tablets to find the rhythms in the movement of the skies. While other boys practiced archery with their bows or played the game of stones, he worked – sometimes in the sand, sometimes on discarded bits of clay, sometimes on his practice tablet – drawing the lines that made the names of the zodiac.

His own, Taurus,  he already knew. His mother was Aquarius  and his father  Leo. His brother's Scorpio was going to take more practice.

"You will learn", reassured his mother as she handed him a ball of dough to flatten and mark his name before she baked it. "You need to be patient like the bull who knows how to wait."

"You're too young to stay up late", teased his older brother as he gathered his stylus and clay to take to scribal school where he was learning to copy the stories sung by the priests at the ritual feasts.

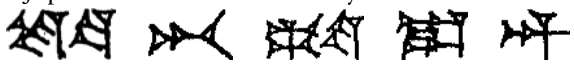
Later, when Father came home, he smiled and tousled the boy's hair. At the meal table he looked at the boy, saying, "Tonight you will go with me. If your grandfather's figures are correct, we will observe and record again the great wandering star's travel across the sky. It will be a good omen for the king."

John Steele, Mathieu Ossendrijver (eds.) | Studies on the Ancient Exact Sciences in Honor of Lis Brack-Bernsen | Berlin Studies of the Ancient World 44
(ISBN 978-3-9816384-5-5; URN urn:nbn:de:kobv:11-100246190) | www.edition-topoi.de

The boy returned his father's smile with a grin and a smug look to his brother. "Bring your cloak", said his father, "along with your practice tablet and a keen eye. The night will be cool and we may have to wait and watch until dawn".

Thus it was that the boy began his studies beside his father, learning to copy what others before had predicted, to record the positions of the moving stars in relation to the stationary normal stars, and to figure when the patterns would occur again. Sometimes he would start and have to smooth the clay to start again. His father checked his work until the day his planet names were correct:

Jupiter Venus Mercury Saturn Mars



He was even able to accompany his father and others on a journey to Uruk to consult with the astronomers there about a particularly puzzling star formation. They were greeted with courtesy, offered cool refreshments, and escorted to the chambers where the observers had laid out their tablets for consultation. For two days they pored over the figures in question. On the next three nights they studied the sky: arguing about possibilities, clarity of terms, and corrections in calculations.

When they had finally come to an agreement, the two groups exchanged copies of the tablets that contained the work they had agreed upon. Father told him the information would be transferred to almanacs – those collections of findings recorded on the observational tablets which were accumulated and stored for reference to predict and verify the positions of the planets during the months of the year.

Under the watchful eye of his father, the boy became skilled in using his stylus to write and record the positions of the planets as they crossed the territories of the zodiac.

Venus in Pisces, First Visibility

Mars in Leo, Stationary

Jupiter in Aries, Opposition

Mercury in Gemini, Last Visibility

Mars Leo Reaches

With time, study, practice, and encouragement, as the boy grew he was able to join the ranks of the scribes with the solemn tasks included in their mission as astronomers in the king's court. Their clay tablets, carefully recorded and stored, lay hidden in rubble and dust for centuries waiting to reveal their findings to curious minds.

Today we wonder, observe, study, and wonder again – finding our own way back to the early astronomers who also wondered and wrote their observations of the mysteries of the sky. As we study the tablets, we reach across the years and meet the challenges faced by our ancestors, marveling with them at the elegance of the universe.

Many thanks to Lis Brack-Bernsen for organizing the first Regensburg meeting of researchers of Babylonian astronomical tablets. Lis led the way for us modern astronomers to converse, comment, collaborate and continue to share our works with the ancient cuneiform tablets.

The following tablet, LBAT 1591, is a brilliant example of a school tablet for early scribes learning to record astronomical events (Fig. 1). A practice tablet for modern scholars beginning to translate ancient texts. The cuneiform lines used in this essay were taken from that tablet.

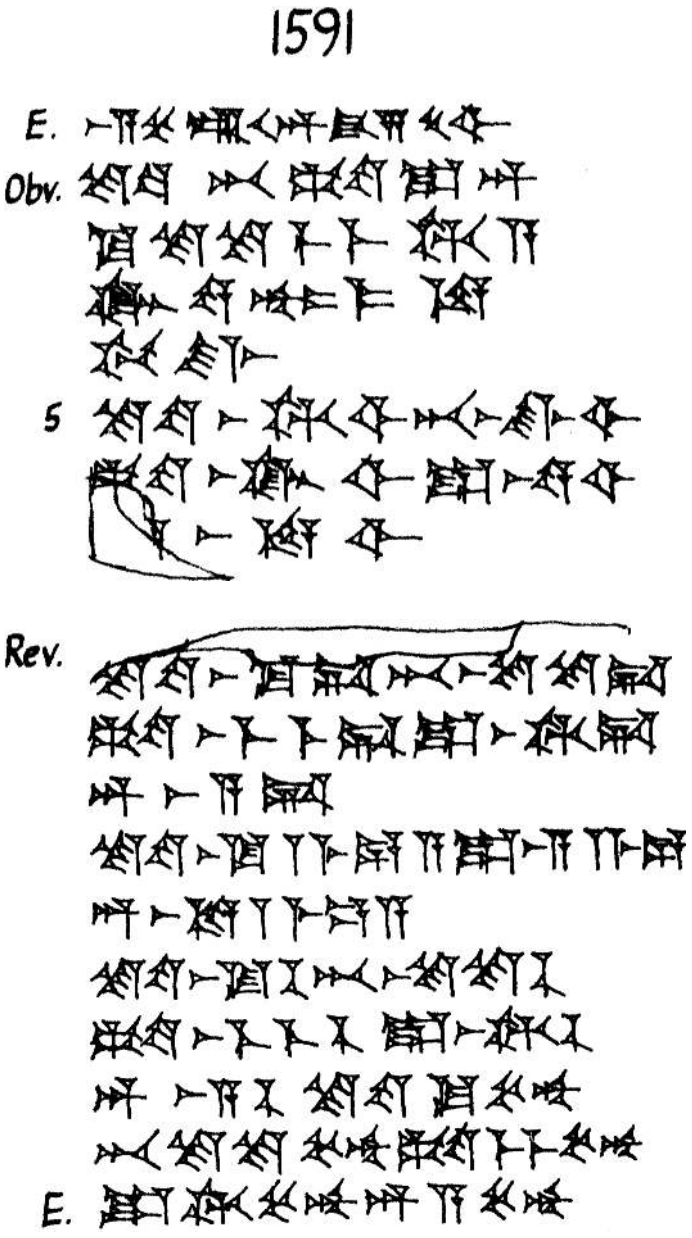



Fig. 1 LBAT 1591.

## Illustration credits

1 Copy no. 1591, in: *Late Babylonian Astronomical and Related Texts*. [LBAT.] Copied by T. G. Pinches and J. N. Strassmaier, prepared for publication by A. J. Sachs, with J. Schaumberger. Brown University Studies 18. Providence, RI: Brown University Press, 1955, p. 256.

**NORBERT A. ROUGHTON**

passed away on Saturday, January 14, 2017, at the age of 79.
Roughton (B.S., M.S., John Carroll University; Ph.D., Saint Louis University) was Professor Emeritus of Physics and former Chairman of the Physics Department at Regis University in Denver, CO. At Regis University, his teaching covered Physics, Astronomy, History of Science and Computer Science. While his early scientific interests were located in the area of Experimental Nuclear Astrophysics, his research since the 1980s focused on Babylonian Astronomical Texts, and he was a regular participant in the Regensburg workshops on Babylonian astronomy.