expression *zi shā Shamash* and *zi shā Sin*, literally 'life of the sun-god' 'life of the moon-god'. The progress of sun and moon along the sky was to the priest-astronomers the visible manifestation of the life of the light-gods, which they subjected to precise numerical operation. Numbers with six sexagesimals even occur in the tables, not to exhibit an accuracy of thousand-millionths, but because the ratio of $\frac{1}{5}$ needed here can only be expressed in the Babylonian numerical system by a very long number. They also had to face the difficult problem of how to derive the lengths of months from a column of variable velocities, a problem indeed of integration of reciprocals, and they solved it in a cumbersome way by dissecting the process into small parts, hence in a way similar to what in modern times is called ‘mechanical quadrature’. But in the columns of this system there are many numbers as yet unravelled.

Computation of eclipses was the other objective of the lunar tables. Eclipses depend on the moon’s latitude. Hence some few columns are interposed to serve for the computation of latitude. By their skilful structure they have presented great difficulties to modern investigation. Otto Neugebauer, with the aid of special arithmetical contrivances, was the first to succeed in deciphering and explaining those of the older systems. The Babylonians were well aware that the representation of the variations of the moon’s latitude by a pointed zig-zag line was not satisfactory; if the extreme values are right, the inclination near the nodes is $1\frac{1}{4}$ times too small, and at this point especially the correct latitude is needed for the eclipses. If, conversely, the zig-zag line at the nodes is given the correct slope, its maximum is far higher than the maximum latitude of the moon, and this impairs the computation of the crescent. The difficulty was solved by the tables giving a broken zig-zag, which has its inclination doubled at the intersection with the ecliptic. It was constructed in such a way that in a simple zig-zag line between $+6$ and $-6$ all values below $1\frac{1}{4}$ were doubled and all above it were increased by $1\frac{2}{3}$. There is no indication of the unit used. If we assume this maximum of $7\frac{1}{2}$ to correspond to $5^\circ$, the well-known greatest lati-