

HISTORICAL ECLIPSES AND EARTH'S ROTATION

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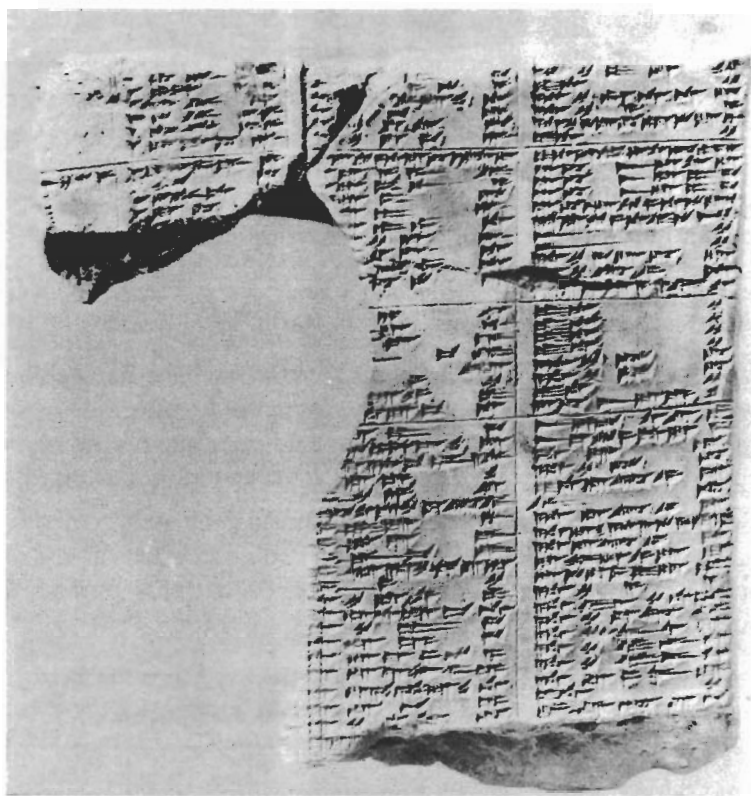


Fig. 4.7 A copy of the Assyrian Chronicle containing a record of the solar eclipse of 763 BC. (Courtesy: British Museum.)

Several damaged copies of the Assyrian Chronicle are preserved in the British Museum. A photograph of one of these tablets, recording the eclipse, is shown in figure 4.7.

The Assyrian Chronicle records very few natural events. It is mainly a list of the annual *limmu*, senior officials after whom the year was named. The practice of appointing *limmu* began as early as the eighteenth or nineteenth centuries BC. In translations, the Greek equivalent of the term *limmu* – i.e. *eponym* – is usually preferred. This in turn has found its way into English and means ‘a person who gives his name to something’. During later centuries in Assyria, the eponym was a provincial governor; however, several kings also held this office. The Assyrian system of annual eponyms was probably the origin of the Greek practice of appointing archons (see section 4.3) and the Roman system of consuls, each of whom held office for one year.

A complete list of Assyrian eponyms is preserved from 910 to 646 BC (Millard, 1994, pp. 55–62). Since several kings of Assyria mentioned in the

list were also rulers of Babylon, it is possible to deduce the year when Bur-Saggile was eponym from Ptolemy's *Canon of Kings* (see Toomer, 1984, p. 11). This year corresponds approximately to BC 763. The month Siwan, the third month of the year, was equivalent to May–June. Reference to the charts of Oppolzer (1887) shows that between 777 and 745 BC only two eclipses could have been large in Assyria: BC 765 Feb 10 and 763 Jun 15. Of these, Feb 10 is far too early for Siwan and hence the date of the eclipse must be BC 763 Jun 15. This date was accepted by Fotheringham (1920b).

As no other eclipse is mentioned in the Assyrian Chronicle, Fotheringham supposed that it must have been total somewhere in Assyria. However, this suggestion is unfounded; the record gives no information regarding magnitude, although the eclipse was presumably very striking. It may well have been seen at the Assyrian capital of Ashur (lat. = 35.48 deg, long. = -43.23 deg), but the report could have come from some provincial location instead.