

ANNOTATIONS TO TABLE XIV

The chronology is astronomically fixed as follows:

- (1) Dyn. XVIII is fixed as beginning in 2170 A.K., $31\frac{1}{2}$ years after Day 1 Month I of 2139 A.K. by Table XI (A) and (B) and Annotations Column (I).
- (2) Dyn. XIX is independently fixed as beginning in 2430 A.K., 37 to 374 years before the Phoenix dating of the 27th year Ramessu II, by Table XI (A) and Annotations Column (2), and by monumental years of Table XIII.
- (3) The dates of commencement of Dyns. XVIII and XIX, being thus astronomically fixed, give the duration of Dyn. XVIII as 260 years, this agreeing with Petrie's independently derived duration of Dyn. XVIII Table XII.

The statement of chronology for Dyn. XVIII, as above, is confirmed by the following identities relating to recorded heliacal risings of Sirius :

- (4)(a) A heliacal rising of Sirius was observed on Day 9 Month XI of 9th year Amenhotep III = $2203\frac{1}{2}$ - $2204\frac{1}{2}$ A.K. (Table XIV).
(b) Sirius rose heliacally at Memphis on 18th July (Julian) $2203\frac{1}{2}$ A.K. = 1796 B.C. (Plate LX).
(c) By Table XI Annotations Column (I), Day 9 Month XI in 1796 B.C. coincided with 19th July (Julian).
Lockyer observes that the early morning ground mists of Egypt might cause a heliacal rising to be observed a day late, as an observation from the darkened interior of a temple could date a heliacal rising a day earlier.
- (5)(a) A heliacal rising of Sirius was observed on Day 28 Month XI in the 33rd year Tahutmes III = $2286\frac{1}{2}$ - $2287\frac{1}{2}$ A.K. (Table XIV).
(b) Sirius rose heliacally at Memphis on 18th July (Julian) $2286\frac{1}{2}$ A.K. = 1713 B.C. (Plate LX).
(c) By Table XI Annotations Column (I), Day 28 Month XI in 1713 B.C. coincided with 17th July (Julian). Refer Note to (4) above.
- (6)(a) By repetitions of the 103 years cycle of Table III, new cycles began at 2163 A.K. and 2266 A.K.
(b) By (4) and (5) above the heliacal risings were observed in years 2203 A.K. and 2286 A.K., respectively 20 and 40 years after the beginning of the 103 years' cycles.
(c) The two intervals—respectively 7305 and 14610 days according to the intercalated 365 days' year of Table III—confirm that the heliacal risings were being observed in relation to the vague year and the secretly observed intercalated year. Refer Table XI Annotations Column I and ¶¶ 123-125.

The Chronology of Dyn. XVIII, again, is confirmed by the following identities relating to recorded new moon festivals, defined by Tahutmes III as held 17 days after the preceding full moon:

- (7)(a) A festival of the new moon was held on Day 21 Month IX of the 23rd year of Tahutmes III = $2276\frac{1}{2}$ - $2277\frac{1}{2}$ A.K. (Table XIV), given as 17 days after the Full Moon of the Coronation Anniversary on Day 4 Month IX.
(b) By calculation the full moon occurred about midnight 26th April (Julian).
(c) By Table XI Annotations Column (I) Day 4 Month IX coincided with 26th April (Julian), thus confirming the recorded observation, and the fact of the Festival of the New Moon being held 17 days later on Day 21 Month IX.
- (8)(a) A Festival of the new moon was held on Day 30 Month VI of the 24th year of Tahutmes III = $2277\frac{1}{2}$ - $2278\frac{1}{2}$ A.K. (Table XIV) ; being, presumably, as in 7 (a), 17 days after the preceding Full Moon of Day 13 Month VI.
(b) By calculation, the full moon occurred on the evening of 4th February (Julian) so that the Festival of the new moon should have fallen on the evening of 21st February (Julian).
(c) By Table XI Annotations Column (I), Day 13 Month VI began at sunset of 4th February (Julian) and Day 30 Month VI began at sunset of 21st February (Julian).

The same datings, as concerning the placing of the vague calendar year in relation to the seasons, are confirmed by the Syrian harvest datings of Tahutmes III.

The statement of chronology for Dynasty XIX is confirmed by the following identities:

- (9)(a) By the datum of Table XI Annotations, Column (I), Day 1 Month I had receded back to coincidence with the heliacal rising of Sirius on 19th July, $2433\frac{3}{4}$ A.K. = Tab. year $2435\frac{1}{2}$ of Plate LX.
(b) By the chronological and historical data of Plate LXI, the latter year, 2433 A.K. began the first year of *coregency* of Ramessu I, which included the beginning of 2434 A.K.
(c) Later Egyptian tradition, as preserved in the King Lists of Manetho and in the Old Egyptian Chronicle, identified the beginning of a Phoenix cycle with the 1st year of Ramessu II (Table XI Annotations, Col. 5), confusing the identity above with the Phoenix cycle of the 27th year Ramessu II, when the revision of the Calendar (Table XI Annotations, Col. 2) again made Day 1 Month I include the heliacal rising of Sirius.
- (10)(a) The short period *pseudo-sell* hebs of Ramessu II ended in his 46th year $2486\frac{1}{2}$ - $2487\frac{1}{2}$ A.K. (Table XI Annotations Col. 2. and Table XIV).
(b) Resumption of the normal series of Sed hebs, beginning from the 46th year of Ramessu II, would give the first 30 years' Sed heb period ending in $2516\frac{1}{2}$ - $2517\frac{1}{2}$ A.K.
(c) The latter date gives the 1st year of Amenmeses (Table XIV) as fixed by the monumental and literary data of Table XIII. There should therefore be a Sed heb record of the 1st year of Amenmeses.
(d) Amenmeses died before the completion of his 1st year, and has left a record of a Sed heb.