gani, who invariably follows Ptolemy, should not here indicate the change of color in so celebrated a star. Negative proofs are, however, not often conclusive, and, indeed, El-Fergani makes no reference in the same passage to the color of Betelgeux (*α* Orionis), which is now red, as it was in the age of Ptolemy.

It has long been acknowledged that, of all the brightest luminous fixed stars of heaven, Sirius takes the first and most important place, no less in a chronological point of view than through its historical association with the earliest development of human civilization in the valley of the Nile. The era of Sothis—the heliacal rising of Sothis (Sirius)—on which Biot has written an admirable treatise, indicates, according to the most recent investigations of Lepsius,* the complete arrangements of the Egyptian calendar into those ancient epochs, including nearly 3300 years before our era, "when not only the summer solstice, and, consequently, the beginning of the rise of the Nile, but also the heliacal rising of Sothis, fell on the day of the first water-month (or the first Pachon)." I will collect in a note the most recent, and hitherto unpublished, etymological researches on Sothis or Sirius from the Coptic, Zend, Sanscrit, and Greek, which may, perhaps, be acceptable to those who, from love for the history of astronomy, seek in languages and their affinities monuments of the earlier conditions of knowledge.†

* See *Chronologie der Ægypter*, by Richard Lepsius, bd. i., 1849, s. 190–195, 213. The complete arrangement of the Egyptian calendar is referred to the earlier part of the year 3285 before our era, *i. e.*, about a century and a half after the building of the great pyramid of Cheops-Chufu, and 940 years before the period generally assigned to the Deluge. (Compare *Cosmos*, vol. ii., p. 114, 115, note.) In the calculations based on the circumstance of Colonel Vyse having found that the inclination of the narrow subterranean passage leading into the interior of the pyramid very nearly corresponded to the angle 26° 15′, which in the time of Cheops (Chufu) was attained by the star *α* Draconis, which indicated the pole, at its inferior culmination at Gizeh, the date of the building of the pyramid is not assumed at 3430 B.C., as given in *Cosmos* according to Letronne, but at 3970 B.C. (*Outlines of Astr.*, § 319.) This difference of 540 years tends to strengthen the assumption that *α* Drac. was regarded as the pole star, as in 3970 it was still at a distance of 3° 44′ from the pole.

† I have extracted the following observations from letters addressed to me by Professor Lepsius (February, 1850). "The Egyptian name of Sirius is *Sothis*, designated as a female star; hence ἡ Σῶθις is identified in Greek with the goddess *Sote* (more frequently *Sit* in hieroglyphics), and in the temple of the great Ramses at Thebes with Isis-Sothis (Lepsius, *Chron. der Ægypter*, bd. i., s. 119, 136). The signification of the root is found in Coptic, and is allied with a numerous family of words,