

itself a proof of the interest which this natural phenomenon could not fail to awaken, by calling forth many important questions, in an epoch so brilliant in the history of astronomy. For (notwithstanding the general rarity of the appearance of new stars) similar phenomena, accidentally crowded together within the short space of thirty-two years, were thrice repeated within the observation of European astronomers, and consequently served to heighten the excitement. The importance of star catalogues, for ascertaining the date of the sudden appearance of any star, was more and more recognized; the periodicity* (their reappearance after many centuries) was discussed; and Tycho Brahe himself boldly advanced a theory of the process by which stars might be formed and molded out of cosmical vapor, which presents many points of resemblance to that of the great William Herschel. He was of opinion that the vapory celestial matter, which becomes luminous as it condenses, conglomerates into fixed stars: "Cœli materiam tenuissimam, ubique nostro visui et planetarum circuitibus perviam, in unum globum condensatam, stellam effingere." This celestial matter, which is universally dispersed through space, has already attained to a certain degree of condensation in the Milky Way, which glimmers with a soft silvery brightness. Accordingly, the place of the new star, as well as of those which became suddenly visible in 945 and 1264, was on the very edge of the Milky Way (quo factum est quod nova stella in ipso galaxiæ margine constiterit). Indeed, some went so far as to believe that they could discern the very spot (the opening or *hiatus*) whence the nebulous celestial matter had been drawn from the Milky Way.† All this reminds one of the theories of

the phenomenon of the new star by a concourse of country people, need not, therefore, be here noticed.

* Cardanus, in his controversy with Tycho Brahe, went back to the star of the Magi, which, as he pretended, was identical with the star of 1572. Ideler, arguing from his own calculations of the conjunctions of Saturn with Jupiter, and from similar conjectures advanced by Kepler on the appearance of the new star in Ophiucus in 1604, supposes that *the star of the Magi*, through a confusion of *ἀστὴρ* with *ἀστρον*, which is so frequent, was not a single great star, but a remarkable conjunction of stars—the close approximation of two brightly-shining planets at a distance of less than a diameter of the moon.—*Tychonis Progyrnasmata*, p. 324–330; contrast with Ideler, *Handbuch der Mathematischen und Technischen Chronologie*, bd. ii., s. 399–407.

† *Progyrn.*, p. 324–330. Tycho Brahe, in his theory of the formation of new stars from the *Cosmical vapor of the Milky Way*, builds much on the remarkable passages of Aristotle on the connection of the