

happens in using the telescope. Three of this number were almost in contact with one another, and *four* of them shone as if through a mist, so that the space around them, having the form drawn in the appended figure, appeared much brighter than the rest of the sky, which was perfectly clear, and looked almost black. This appearance looked, therefore, almost as if there were a *hiatus* or interruption. I have frequently observed this phenomenon, and up to the present time as always unchanged in form; whence it would appear that this marvelous object, be its nature what it may, is very probably permanently situated at this spot. I never observed any thing similar to this appearance in the other fixed stars." (The nebulous spot in Andromeda, described fifty-four years earlier by Simon Marius, must therefore either have been unknown to him, or did not attract his attention.) That which has usually been regarded as nebulous matter, adds Huygens, "even the Milky Way, when seen through telescopes, exhibits nothing nebulous, and is nothing more than a multitude of stars, thronged together in clusters."* The animation of

* "Ex his autem tres illæ pene inter se contiguæ stellæ, cumque his aliæ quatuor, velut trans nebulam lucebant: ita ut spatium circa ipsas, qua forma hic conspicitur, multo illustrius appareret reliquo omni cælo; quod cum apprime serenum esset ac cerneretur nigerrimum, velut hiatus quodam interruptum videbatur, per quem in plagam magis lucidam esset prospectus. Idem vero in hanc usque diem nihil immutata facie sæpius atque eodem loco conspexi; adeo ut perpetuam illic sedem habere credibile sit hoc quidquid est portenti: cui certe simile aliud nusquam apud reliquas fixas potui animadvertere. Nam cæteræ nebulosæ olim existimatæ, atque ipsa via lactea, perspicillo inspectæ, nullas nebulas habere comperiuntur, neque aliud esse quam plurium stellarum congeries et frequentia."—Christiani Hugenii, *Opera varia*, Lugd. Bat., 1724, p. 540-541. "Of these, however, those three almost contiguous stars, and, with these, four others, shone, as it were, through a nebula, so that the space around them, as is shown in this figure, is much more brilliant than all the rest of the sky; and when this is very serene and appears quite dark, it seemed broken by a sort of gap, through which one looked upon a brighter region behind. The same thing I have since beheld over and over again, without any change in its appearance and in the same position, so that one might almost believe that this marvelous object, whatever it is, is permanently fixed there; it is certain I have nowhere else noticed any thing similar to this in the other fixed stars; for those which have generally been considered as nebulæ, and even the Milky Way itself, when seen through a telescope, are found to have nothing nebulous about them, but are nothing more than a multitude of several stars clustered together." Huygens himself estimated the powers he employed in his twenty-five feet refractor as equal to a hundred diameters (p. 538). Are the "quatuor stellæ trans nebulam lucentes" the stars of the trapezium? The small and very rough sketch (Tab. xlvii., fig. 4, *Phenomenon in Orione Novum*) represents only a group