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CORRESPONDENCE

To the Editors of 'The Observatory'

Rosse versus Herschel: Rivalry among Great-Telescope Families.

In 2023 the dispersal began through an Irish auction-house of part of the Birr Castle astronomical library of printed books. This will no doubt come as a surprise to some readers of this letter. The writer was thus fortunate to acquire two lots in the sale, including the Birr copy of Captain Smyth's *Cycle of Celestial Objects* 1844. The point of interest which prompts this letter is one of the marginal annotations in an evidently mid-19th Century hand* added by a previous owner, presumably the third Earl of Rosse, in Volume 2 of the *Bedford Catalogue*.

Appended to Smyth's entry for θ^1 Orionis on page 130 of that volume where Smyth remarks on the non-discovery of the fifth star 'E' by earlier observers in the words "Now when we consider the eye of Herschel,..." there is the following marginal comment in extremely faint pencil: "And his ill-defining telescopes, the non-appearance of this star in the 40 foot proves the utter worthlessness of that gigantic humbug" (Fig. 1). There may be some justice in this uncharitable assessment of the optical quality of Herschel's 40-foot, which was in any case never routinely used by its maker as a working instrument in his major observational programmes. The remark is, however, totally unfounded with respect to Herschel's smaller telescopes, as for instance amply proven by the astonishing performance of the '7-foot' of only 6.2-inches aperture† on close double stars: on that instrument the great binastrist not infrequently used magnifications of $\times 932$ or even higher as standard working powers and discovered a number of binaries when at 1-arc-second separation or even less — ζ Cancri AB, ω Leonis, η Coronae, ξ Scorpii AB, *et al.*‡.

* For instance, using the archaic long 'S'. In fact, the style of hand bears a very close similarity to that of the caption on Rosse's original 1845 April sketch of M51 Canum Venaticorum as reproduced on page 233 of C. Mollan's *William Parsons, 3rd Earl of Rosse* (Manchester University Press), 2014.

† The 'Uranus' 7-foot telescope.

‡ These were all discovered with the 7-foot in 1780–82 during Herschel's early single-handed 'Second Review' of the heavens, a specifically high-power examination of individual bright stars. Contrary to a widespread myth this work was not conducted jointly with Caroline at the much larger 20-foot, which instrument contributed negligibly to this systematic search for very close double stars. The famous 20-foot 'Sweeps' performed by the Caroline & William partnership were a completely separate research programme commenced in 1784 and using far lower powers.

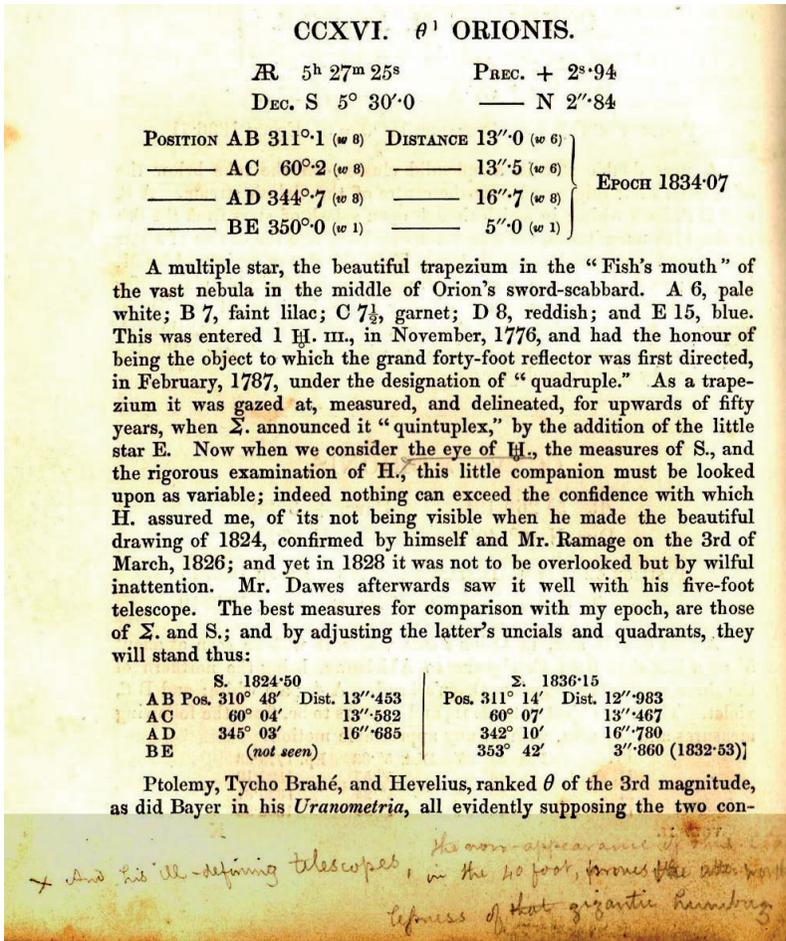


FIG. 1

A scan of the relevant page with the contrast of the lower margin stretched to make the marginal note legible.

Rosse's ill-disposed marginal remark just quoted — surely uncharacteristic of the Earl, a generous-spirited man by all account — reminds this writer, conversely, of that which he has seen reported somewhere as having been made by Caroline Herschel when told of Rosse's own construction of his great

Leviathan, to the effect that “some fool has claimed to build a telescope more powerful than my brother’s 40-foot”. There is nothing new, it would seem, about aperture-envy.*

Yours faithfully,
CHRISTOPHER TAYLOR†

Mr. J. C. Taylor
The Coach House
Hanwell Castle
Nr Banbury
OX17 1HN

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†The Editors were dismayed to learn that Mr. Taylor passed away on 2024 December 18

REVIEWS

Supernova, by Or Graur (MIT Press), 2024. Pp. 212, 17.5 × 12.5 cm. Price \$16.95 (about £13) (paperback: ISBN 978 0 262 54314 9).

MIT Press recently launched a set of small books in their Essential Knowledge series; their website currently lists 27 titles on a wide variety of topics, from Astronomy to Whiteness. The astronomy category comprises two quite separate volumes, although on related topics, *Galaxies* and *Supernova*, both by Or Graur. They are pocket-sized volumes, and (if the book under review is typical) avoid mathematics but have copious references (by endnotes) to more technical material, all gathered at the end by chapter.

The style makes for easy reading, but a lot of information is included, from the earliest observations by the Chinese and the Romans (that surprised me — I don’t think of the Romans as observers of the sky) to the present day. Apart from the historical introduction, the seven other chapters generally take a theme and develop it. The book is well illustrated, with a mixture of diagrams, graphs, tables, black-and-white photos, and eight colour plates. There is a useful glossary and a couple of pages of definitions. I am not an expert on supernovae, but I believe that he covers all the necessary topics at a level suitable for the layman. An unusual feature is a series of pages with a key quotation (usually a single sentence) from his text, printed in large font in white on a black background. Reading only these pages would give readers a reminder of key points and probably tempt them to read more.

The price is very reasonable, and I can recommend this book unreservedly. —
ROBERT CONNON SMITH.

*Rosse’s own 72-inch, as is well-known, came in for its own fair share of this quite apart from Caroline’s sour remark, as, for instance, the comment of a visiting French astronomer who said that he was shown something “they told me was Saturn”! Anyone familiar with the use of large reflectors at low-altitude sites knows full well how temperamental they can be and how hyper-sensitive to the effects of seeing, so it is absurd to attribute this unbelievably poor performance to the optical quality of an instrument which had easily split γ^2 Andromedae when at 0.6 arc seconds separation.