

what we propose) is not the problem that Professor Wynne envisages. After all, the precision required is of the same order as that for the telescope motion, and the telescope weighs tens of tonnes rather than a mere 50 or so kilograms. Incidentally, the echelle will be a special ruling 300 mm wide.

Thirdly, the light lost at the cross disperser is based on Professor Wynne scaling the drawing, and arriving at an apex angle of 40° in the half-prism attached to the immersed echelle. At the time of the paper to which Professor Wynne refers, the apex angle of the prism was undecided and the drawing was, in this respect, purely schematic. Subsequent work has indicated that an apex angle for the half prism of between 27° and 30° would be optimum. This is then directly equivalent to the full prisms in *UCLES*, which have 54° apex angles.

The cross-dispersing half-prism attached to the immersing prism has an important function in addition to dispersion. With a simple immersed echelle, with no cross-disperser attached, parasitic reflections off the entrance face can enter the camera, causing a significant ghost problem. The inclined entrance face of the attached cross-disperser half-prism deflects the parasitic reflection away from the camera. This is the main reason for integrating these components, plus of course the saving of two air-glass interfaces.

Finally, it should be noted that, as a back-up solution to the immersed echelle, we propose the equivalent R2.9 echelle in air. This would be a 600-mm long by 300-mm wide mosaic, with completely separate cross dispersers. Milton Roy inform us that the two rulings could be replicated on a common substrate.

CORRESPONDENCE

To The Editors of 'The Observatory'

Ophiuchus and the Media

On 1995 January 20th a news story travelled across Europe and around the world, on the BBC and, in the US, NBC news, and made countless newspaper headlines, reaching Canada, Brazil, and Australia. The words of the BBC 9 o'clock news were: "an extra sign of the zodiac has been announced by the Royal Astronomical Society." On endeavouring to congratulate the RAS on its most successful press release ever, I was informed there had been none. A letter in *The Observatory* (115, 93, 1995) from Canadian astronomer Jeremy Tatum indicated puzzlement as regards the genesis of the story.

The story was fabricated by the Daily Telegraph's science journalist. He wove the threads together. The RAS, however, made no undue effort to deny it, insofar as the story reappeared unchanged in the *Times* and *Telegraph* on the 21st.

Its content was, in essence, an announcement of the IAU's 1928 decision to alter the number of designated ecliptic constellations from twelve to thirteen; hardly news some 67 years after the event. The media story wove together four misconceptions. First, the juxtaposing of signs and constellations, as had been kept well separate for 18 centuries: Ptolemy's *Almagest* described the unequal-sized constellations, but cited stellar longitudes using the twelve equal

30° signs. Secondly, there was the concept of a *discovery*, a ‘new sign’ had been discovered. Thirdly, the basis for the news story was the assertion that the ‘new zodiac’ would be described by Dr. Jacqueline Mitton, the RAS’s Public Relations Officer, on a forthcoming BBC programme; whereas that programme contained merely some remarks upon the effect of precession, which was hardly news. Fourthly there was the authority cited; that it was an announcement by the Royal Astronomical Society, whereas it was more like a statement by persons promoting the forthcoming BBC programme of remarks by Dr. Mitton.

And so Ophiuchus, having been in the sky for three millenia, was hailed as a ‘discovery’. One is startled that this became a news story which travelled round the world. Not since the supernova in Ophiuchus of 1604 inspired Kepler and Galileo has it caused such a stir. There is a moral from Evelyn Waugh’s *Scoop* to be drawn here.

Yours faithfully,
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REVIEWS

Unveiling Large Scale Structure Behind the Milky Way (ASP Conference Series, Vol. 67), edited by C. Balkowski & R. C. Kraan-Korteweg (Astronomical Society of the Pacific, San Francisco), 1994. Pp. 303, 9¼ × 6 inches. Price \$40 (about £28) (hardbound; ISBN 0 937 70786 4).

The Zone of Avoidance (ZoA) is an odd conception. It is nothing of the sort, of course, since nothing avoids the region of sky behind what is, to us, the Galactic Plane. It is, rather, an artefact of the current inconvenient inverse correlation between wavelength and the number of independent detector elements in a focal plane which currently afflicts telescopes. Equally inconveniently, the Local Group has a very large peculiar velocity relative to the reference frame defined by the Cosmic Microwave Background, with this velocity vector pointing within about 30° of the Galactic Plane. If there is some local mass enhancement which is responsible for this — a Great Attractor — much of it lurks behind the ZoA. While there is, perhaps, pretty marginal evidence that there is a Great Attractor, the continuing debate illustrates just how little is known about what lies behind the stars and dust which dominate our visual impression of the sky.

This conference summarizes the state of the art of this patchy information, and what is being deduced from it. The proceedings contain the evidence of their own demise, introducing the several new surveys — near-infrared and 21-cm — which are about to revolutionize the subject. Aye, there’s the rub. This business is so fast changing that the dataset will be quite different by the time you read this. The recent discoveries of the Sagittarius dwarf and Dwingeloo 1 illustrate that interesting things remain to be found, and are being found. Rather soon, the ZoA will be of primarily historical interest. — GERRY GILMORE.