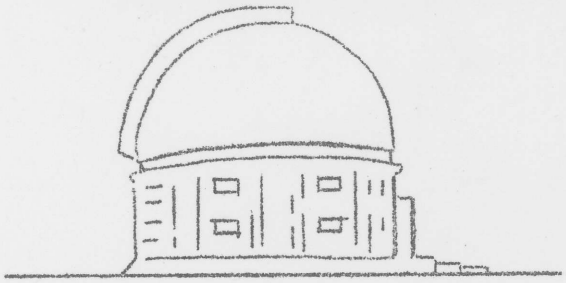
DAVID DUNLAP DOINGS



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EDITORIAL

In the Interest of Better Writing

One who writes, reads theses and edits becomes acutely aware of certain misuses of words and errors of sentence construction which are so frequently used that they are thought by many to be acceptable. I have picked out a few such things which bother me, and, as support for my feelings, I cite the new second edition of Fowler's "Modern English Usage".

The word "data" is plural. Therefore, we should say, "These data are presented", not "This data is presented".

A very commonly encountered example of poor sentence construction is the use of the so-called "unattached participle". Writers often make some such statement as, "The spectrograms were obtained using the Hilger spectrograph". Here the participle, "using", could only be construed as being attached to a person, but no person is mentioned; clearly the spectrograms didn't use the spectrograph! To avoid this faulty construction one can say, "with the use of", or one can say, "The Hilger spectrograph was used to obtain the spectrograms".

The "as" clause, where "as" is used to mean "because" is deplored by Fowler with only two exceptions, the exceptions being: when the clause precedes the main part of the sentence (example: "As the horse was a good performer I bet on him".), and when the substance of the clause is a matter of common knowledge (example: "I will not translate, as you know German".). On the other hand, such a sentence as, "We did not observe these stars as they were too faint." is, according to Fowler, "unpleasant to anyone with a literary ear".

There are many other examples: the confusion of "infer" and "imply", the misuse of "anticipate" to mean "expect", the faulty use of "mutual" (as in "mutual friend"), the use of "alternative" when no question of choice is really involved.

J. F. H.

STRICTLY PROFESSIONAL

The 74-inch

In the poor weather during the past month little progress has been made on either photometric or spectrographic programs. The 25-inch camera is still on the Hilger spectrograph, and the important spectrographic programs are the filling in of the MK standards between 0^h and 5^h and Doug Hube's stars around about 6^h. For later observing Joan Hube has added some new MK standards which are needed and Dr. FitzGerald has added some bright stars in need of plates for classification.

It was interesting to see that Anson Moorhouse recorded the dome temperature as colder than -15°F on February 19-20, whereas the minimum outside temperature both at Observatory House and at The Devil's Elbow that night was -7°F. Apparently the titanium paint works almost too well!

Gerry Longworth has cleaned and tightened the dec. clamp and he says it will now hold even in the wind. In the immortal words of a prominent political leader, "We'll have to wait and see".

The 24-inch

Word has been received from the engineer in Holland that the drive electronics have now been corrected and have successfully undergone high-temperature tests. The panel is now being air-freighted back to Toronto, so the 24-inch should be in working condition again very soon.

A new single-channel infra-red photoelectric photometer has been built in the workshop by Dave's Earlam and Blyth. The photometer employs an S1-type DuMont photomultiplier with a sensitivity range from 3000 A to 12,000 A, and has a filter slide interchangeable with the ones used in the UBV photometers. A wide variety of filters are available for it. The tube is cooled by an electrical Frigitronics unit. Tests on the photometer will begin as soon as the 24-inch is back in working order.

The 19-inch

A new two-channel UBV photometer for the 19-inch is presently under construction in the workshop. This will be identical to the one that is now on the 24-inch. It is hoped that it will be ready sometime next summer.

Image Tube

The Carnegie image tube for which we have been hoping during the past year has now been assembled and tested and will be shipped to us during March, according to word from Dr. W. Kent Ford.

Also expected in March is the arrival of Dr. Stanley Jeffers to take up a post-doctoral fellowship. Dr. Jeffers is a recent Ph.D. from Prof. McGee's image-tube lab. at Imperial College. Pending adaptation of one of the spectrographs to accommodate the image tube (or acquisition of a new spectrograph) it is conceivable that we could test the image tube for direct photography at the Nasmyth focus of the 24-inch telescope.

Campus Telescopes

Ted Bednarek took some very creditable photographs of the Orion Nebula with the 16-inch reflector, the first that have been taken with this telescope; and John Percy's thesis includes the first serious photometric project completed with this instrument. * * * The Campus Observers, Ted, Mark Naylor and Hugh Ross, have re-aligned both the 16-inch and the 8-inch telescopes so that their axes are now very close to the pole; and they have adapted the Unitron Astro camera to the 8-inch so that, with the help of the bulb-activated shutter, short exposures may be made on the sun.

Papers submitted during February

S.P.S. Anand and Inge Sackmann	Slowly Rotating Convective Models with Radiation Pressure.
R.D. McClure and S. van den Bergh	Five-Colour Intermediate-band Photometry of Stars, Clusters and Galaxies.
S. van den Bergh, W.J. Medd, J.L. Locke and B. H. Andrew	Observations of Variable Radio Sources at 2.8 cm.
J.F. Heard and Frank Hawker	Note on A New Control Console for the Dunlap 74-inch Telescope.
David Crampton	B Emission Stars and Galactic Rotation.

March Seminars and Colloquia

March 6 Special "Countdown"	Dr. Norman Baker, Columbia University, "Properties of Horizontal Branch Stars as Inferred from Pulsation Characteristics of RR Lyrae Stars".
March 13 Special "Countdown"	Dr. J. B. Oke, "Instrumentation at Palomar".
March 14 Colloquium, Rm. 103, McLennan Lab. 4 p.m.	Dr. J. B. Oke, Mount Wilson and Palomar, "Recent Investigations of Quasi Stellar Objects".

March 20	S. van den Bergh, "Five-Colour Photometry of Stars, Clusters and Galaxy".
March 27	Thomas E. Lutz, Illinois, "Radial Velocities from the Automated Microphotometry of Dunlap Spectrograms".

Other Coming Events

All are reminded of the Astronomical Sessions at the University of Waterloo on April 8-9. Titles of papers and short abstracts should be submitted to Dr. Heard by March 20. Students who propose to attend should consult their supervisors regarding reservations and notification of the Waterloo hosts.

The dates for the Second June Institute of the Department have been set for June 11 - 14 inclusive. The speakers who have accepted are: Prof. R.F. Christy, Cal. Tech.; Prof. R.P. Kraft, California at Santa Cruz; Prof. E.A. Spiegal, N.Y. University; Prof. E.L. Schucking, Texas. Details of the dozen or more lectures will be announced in a later issue.

Dr. Clement will address the Toronto R.A.S.C. meeting of March 15 on "Novae and Supernovae".

VISITORS

Dr. Pierre Demarque who is visiting us today to give a "Countdown" talk on "Helium Flashes in Stars" is a former graduate student (Ph.D. 1959) and a former member of the teaching staff (1962-66). Dr. Demarque will stay over tomorrow for John Percy's Senate Oral Examination on his Thesis - "The Nature of the β Cephei Stars".

Dr. J. B. Oke who will visit us on March 13-14 for a "Countdown" and a joint Astronomy-Physics colloquium is also a former student (B.A. 1949, M.A. 1950) and a former member of the teaching staff (1953-57). Dr. Oke has recently returned to Mount Wilson and Palomar from an observing session at Mount Stromlo.

Two other former students, Dr. G. A. Bakos of Waterloo and Dr. K. A. Innanen of York visited us during February to give "Countdown" talks.

Dr. Icko Iben of M.I.T. gave a fascinating talk on Helium in the Oldest Stars on February 21.

Mr. Poindexter of Boller and Chivens spent February 27 at the Department and the Observatory.

DEGREES

Chris Aikman and Tom Barnes were awarded their M.Sc's at the Senate meeting of February 9.

AWARD

Inge Sackmann has been awarded an N.R.C. Post-doctoral Fellowship for 1968-69 for study in Germany.

COMINGS AND GOINGS

Dr. van den Bergh's 11-night, 99.5-per-cent-photometric observing session at Cerro Tololo from Jan. 18 to 28 yielded him UBV observations of (a) the 50 brightest clusters in the Magellanic clouds, (b) elliptical galaxies located outside clusters, (c) southern stars located in reflection nebulae, (d) some galactic and globular clusters, (e) 30 Dor, η Car, the Orion and Crab nebulae.

Gretchen Hagen has returned from Kitt Peak, and Peter is due home about mid-March. Peter has had bad luch with weather, but if he gets half of his remaining allotted observing time his program will be in pretty good shape.

Dr. Seaquist is returning today from an observing session at the Algonquin Radio Observatory.

David DuPuy attended the Conference on Seyfert Galaxies and Related Objects in Tucson (Steward Obs.) on Feb. 13-16, reading a paper on "Emission - like Haro Galaxies".

Dr. Roeder gave a Seminar at the Queen's Physics Department on Feb. 8 on "The Absorption Spectra of Quasi-Stellar Objects".

Dr. Fernie gave a talk to the Ottawa Centre of the R.A.S.C on Feb. 15 on "Measuring Astronomical Distances by Cepheid Variables".

Dr. Hogg attended a two-day (Feb. 15-16) Conference at Mount Holyoke College, Mass., on the occasion of a visit there by Mme. Alla Massevich of the U.S.S.R. who was the principal speaker.

GASA*

Gassers on the rise

The GASA Gassers unite in one team some of the hottest hockey prospects of our era. Leading the forward charge is the feared front line of Fort, Dodd, and Captain Dubas, while leading the retreat is the indestructible defense of Hardenbergh, Hickok, and Ross. Two new novae have appeared in the lovely yet lethal form of Raymonde Verreault and in the powerful personage of Chris Aikman. (Both of these native Quebecois turned down offers from

the Montreal Canadiens in order to join the Gasser group.)

In League competition so far the Gassers have scored two impressive victories without a setback. Since the squad is continually expanding its roster and since the opposition consists of whoever's on the ice when they get there, the Gassers should go all the way this season.

*Graduate Astronomy Students' Association.

MISCELLANEOUS

René Racine has written recently from Mount Wilson and Palomar:

"My work here is getting along pretty well, although the sky is not quite as good as in Chile. I nevertheless manage to collect a fair amount of observational material, mainly on some selected R Associations, namely MON R2 and C Ma R1 (the one with W CMa as a possible member). Among the interesting objects I find is a very peculiar A(?) star with strong shell characteristics and M_V -1.0

"I have completed a study of the apparent luminosity function of the M87 group of globulars. The brightest clusters occur at B = 21.2 ± 0.2 and the peak of the frequency distribution is at B = 23.2 ± 0.2. I use this to derive $(m-M)_B = 30.65 \pm 0.15$". Preliminary results on the (B-V) colors of these clusters are encouraging but I still need a proper photoelectric sequence for calibration and a few additional 200 in. plates. I also hope to determine the reddening of M87 directly from spectra and UBV of faint field stars and I have asked Bob if he would like to get 7-colors data as we did in M31 and M33. Incidently Bob tells me that he reobserved the M31 and M33 field stars at Kitt Peak and that he finally managed to get this problem straightened out. We hope to come out with a final answer soon. "

The antique orrery, an antique telescope and the brass astrolabe which used to kick around room 104 in the Old McLennan Lab. have been loaned to the McLaughlin Planetarium - which, by the way, is now slated for opening in September.

Newly on display in our Campus reading room are a model of the QE II telescope and a block of quartz left over from the casting of the 157-inch disk.

Gerry and the Daves and Archie have recently reorganized the workshops to accommodate the new milling machine and drill press.

Also reorganized are the student rooms at the Observatory to accommodate new desks.