

HARLOW SHAPLEY IN VARIABLE COMMENTS

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Among the professional astronomers who played a significant role in the history of the AAVSO, Harlow Shapley (1885-1972) ranks probably second in importance only to E. C. Pickering. Rather than recount Shapley's life and achievements in the customary obituary fashion, I should rather quote what the members themselves have said in Variable Comments, published by the Association between 1924 and 1954. This little journal included primarily reports on the meetings and the Recorder's Annual Reports. The years of its publication embrace most of the span of Shapley's Directorship of the Harvard College Observatory, when his influence and friendship were the most valuable.

The following excerpts are not complete. I have refrained from quoting all of the many comments on the delightful social functions, the teas and luncheons at the Observatory Residence, which high-lighted the opportunities for members to get better acquainted with one another and the Observatory staff. Also omitted are the resumés of the scientific papers Shapley presented at the meetings and his "High Lights of Astronomy" that had become traditional until after his retirement. The quotations have been selected as portraying the character of the man - his sense of humor, his helpfulness, and the spirit of good fellowship he engendered, as well as his versatility.

David B. Pickering, on the annual meeting, October, 1923, Vol. 1, page 1, 1924:

Our host, Dr. Shapley, like young Lochinvar, recently came out of the West, and as we watched the "man who has measured the universe" mingle with his guests, fairly bubbling with that dry humor that is such a real part of him, we could well credit the belief that the breezes from the Pacific make gentle souls of those they blow upon.

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The tea was held in the Director's residence, one of the buildings of the Observatory's group, and of course Mrs. Shapley was our hostess: and how perfectly her warm hospitality, her vivacity, and charm, fitted her for that position. Busy as can be with the multitudinous duties of motherhood, she nevertheless finds time to bring her splendid mathematical faculties to the aid of her famous husband. How we should like to digress here, but of course we shall not, and talk of the glorious circumstances, rare indeed, in which man and wife are not only permitted to revel together in the joys of domesticity, but also to be united in mental sympathies and cultural development; to catch the responsive light of comprehension that flashes the other's eyes at the expression of a rare thought; to live together in understanding - does this not surpass even peace? But here! We must stop this and get to the banquet - it's growing late and we must hurry.

Page 10. David Pickering here vividly contrasts the two after-banquet speakers:

It was rumored that Dr. Birkoff, who is professor of mathematics at Harvard University, and was our guest of honor on this occasion, was perhaps more conversant with Einstein's newly revealed principles than anyone else. It was to be his task to give us an untechnical explanation of these principles. Only those who heard him speak could realize how great a task it was. The free and spontaneous translation of an involved Greek text into simple English would be nothing to it. It was a master effort, however, and we all got much from his talk - but how the dear man suffered in his attempt to put into "words of one syllable" this profoundest of all revelations!

Dr. Shapley followed with a summary of the chief things that the science of astronomy has brought to light during the last year - and what a speaker he is! His diction is delightful, his language simple, his facts clearly expressed and easily understood. He fascinates with his grace of address, while his thoughts seem to come faster than he can express them. And always in the flow of ideas we sense that rich admixture of humor that adds such sparkle to the current of his discourse.

C. W. Elmer on the meeting of October, 1924, Vol. 1, page 25:
The Roast (sic) Master went through all the motions of calling upon Elmer, progressing by easy stages until just as he reached the climax he called upon Mrs. Elmer. We have been persuading her for two decades and more than a half that she could talk publicly as we knew she could privately, and we owe thanks to Dr. Shapley for proving it to the well-known world.

Dr. Helen Sawyer Hogg, annual meeting, 1930, Vol. 2, page 36, attempts in verse to impersonate Dr. Shapley:

I flung the lead into the sea of night,
I plumbed the deep profundity of space,
I measured distance with my years of light
To far-flung starry groups, and proved my case.
I made the Cepheids servants of my will;
They whispered information in my ear.
And then I plied my mathematics skill -
Revealed an answer absolutely clear.
Unhappy is this astronomic strife,
For now they say the universe has shrunk.
Some chap is always taking out of life
The joy; but I proclaim his thesis bunk.
I claim this sudden shrinkage and compression
Is due to the Republican Depression!

In Vol. 2, page 37, April 1931, Leon Campbell reports:
It had been suggested in October that it would be of great advantage to our members if we could issue regularly a small bulletin which should contain notes of special interest to observers. The depleted condition of our treasury made it impossible for us to

undertake this, but inasmuch as Dr. Shapley has now offered that for the present at least Harvard College Observatory would meet the expense of mimeographing and distributing such a bulletin, it was voted to accept the offer and begin at once to issue a small bi-monthly A.A.V.S.O. Bulletin to contain the predictions of magnitudes of variables as printed at present in the Harvard Bulletin, as well as other items of temporary and immediate interest to observers.

At the Spring meeting, 1931, Vol. 2, Page 41, Inez L.B. Clough writes:

Thanks to the interest of Dr. Shapley and the generosity of Harvard University \$100,000 has been set aside for the Edward C. Pickering Memorial with the restriction that if at any time variable star astronomy becomes no longer worth while the fund shall be withdrawn for some other use at the Harvard College Observatory. Now it is up to us of the A.A.V.S.O., for the sake of Professor Pickering's memory to prove that variable star astronomy is indispensable.

Leon Campbell, the first Edward C. Pickering Memorial Astronomer, elaborated somewhat on this in "Looking Backward," October, 1931, Vol. 2, p.51: When Pickering died (1919), it had been agreed that such a memorial should be established at Harvard College Observatory:

But a hundred thousand dollars eventually proved to be a prodigious sum, and for a while it looked as if all efforts to raise this fund would prove unavailing. Without going into details, suffice it to say that the Pickering Memorial Fund is an established reality, thanks to the enthusiasm of our own Dr. Shapley.

The rejoicing in 1931-1932 over this important indication of financial security for the AAVSO is unforgettable to those of us around Harvard Observatory at the time. With Shapley's benevolent encouragement and appreciative response to the work of the true hard-working amateurs (those who work primarily for the love of it) the Association continued to grow and work ever more vigorously in order to continue to merit its good fortune. This particular joy, as we shall see later, was to last hardly one short generation.

Fall meeting, 1931, Leland S. Barnes, Vol. 2, page 56:

He (Dr. Shapley) outlined some of the present activities of the observatory in the construction of the new building. Starting with an extended discussion of the gentle art of writing on the table cloth he finally drifted over to telling about the new lecture-room in which all future A.A.V.S.O. meetings would be held. He said it was planned to have the room surrounded by the signs of the Zodiac and further stated that Mr. Calder had suggested that these be so oriented as to bring the sign of Taurus directly over the speaker's platform.

October meeting, 1935, Vol. 3, page 13, by Marjorie B. Leavens. Reports of observations had been published the past 24 years

in Popular Astronomy. They were becoming so numerous as to be a burden to Popular Astronomy and an increasing expense to the AAVSO.

Following a suggestion from Dr. Shapley it was decided to accept the offer of Harvard Observatory to allow these reports to appear quarterly in the Harvard Annals, and to have brief notes from the Recorder, giving current news of variable stars and of the A.A.V.S.O. printed in Popular Astronomy.

At this meeting, and also the following year, Dr. Shapley was elected President of the AAVSO.

Fall meeting, 1937, Vol. 3, page 64, David W. Rosebrugh: Dr. Shapley, who acted as toastmaster, interspersed the talks of other speakers with a rapid fire inventory of the latest scientific discoveries. Occasionally, like the ominous rumbling of an approaching thunderstorm, he issued warnings to the members that one of them would be called upon unexpectedly to make a speech. This electrifying announcement kept everyone actively cudgelling his brain for appropriate remarks in case he should be called upon until Jupiter Tonans finally landed on Mr. Ed. Martz, the planetary observer, who rose manfully to the occasion and described the superb atmospheric conditions he encountered when observing with W. H. Pickering in Jamaica. After this everyone breathed easier and relaxed once more.

Spring meeting, Providence, R. I., 1938, Vol. 3, page 69, Leon Campbell:

Mr. Rosebrugh reported some observations on the "Varying Brightness of Amphitrite".... On account of the discussion last fall as to whether members should present papers on subjects not directly concerned with variable stars, Mr. Rosebrugh justified his position in verse. We feel that this gem should be preserved in the archives and therefore submit it in full.

The poem refers to Dr. Shapley's additional fame as a biologist; he was the first to note a correlation between the temperature and the locomotive speed of ants. Here we quote only part of Mr. Rosebrugh's masterpiece:

Alibi for Ogling Amphitrite

The moving spirit of this work
Which it is hoped we will not shirk,
Is our ex-president, who 'tis said,
Is thoroughly and deeply read
In the ways of warmed up ants.
No doubt he feels if he could study
Insects bitey, small and middy,
A.V.S.O. its hand can turn
To find out what there is to learn
About the asteroids so white
From rapid changes in their light.

Therefore please don't call us flighty
 If we turn from M-stars mighty
 And from ants all hot and bitey
 To observing Amphitrite.

At the same Providence meeting the process for aluminizing mirrors was demonstrated. Leon Campbell reported Dr. Shapley's comments:

He had estimated the numbers of atoms deposited on the interior of the bell-jar as of the order of 2×10^{22} forming a layer about 500 atoms thick, contrasting this enormous number of atoms with the comparatively smaller number of stars in the galaxy.

Seventeenth Annual Report of the Recorder (1947-1948). Vol. 4, page 99, Leon Campbell:

At the recent meeting of the International Astronomical Union, held in Zurich, Switzerland, the Council of that organization - at the request of Dr. Shapley and the Recorder - voted an appropriation of \$250 to partly defray the expense of preparing tracings for the 100 or more far southern variables which are on our program...

Often Shapley indicated his sincere concern for the war and post war plight of foreign astronomers. At the 1950 meeting he made the following suggestion (Vol. 5, page 4. Harry B. Chase):

Dr. Shapley suggested that we should not neglect certain of the foreign observers because of their inability to contribute dues or observations, but should continue to keep them on our mailing list and send them publications.

The year 1951 was a big anniversary year as noted by Margaret W. Beardsley, Vol. 5, page 15:

Dr. Shapley then told about his visit to Mexico during the 400th Anniversary of the University of Mexico. He was luxuriously entertained at the home of Sr. Domingo Taboada, and participated in the dedication of the "Leon Campbell Observatory" at Sr. Taboada's estate...

The 10th Merit Award was given to the Association's much loved benefactor and friend, Dr. Harlow Shapley. It was the 40th Anniversary of the AAVSO, and Dr. Shapley's 30th year as Director of the Harvard Observatory.

In May, 1953, of the Ann Arbor meeting, R. Newton Mayall writes, Vol. 5, No. 10, page 2:

Although Dr. Shapley was not there, his presence was felt, and his great interest in the AAVSO and his friendliness to all its members was recalled when a quip he made at a previous meeting was read from the minutes. His remark was that "Good observations never die, but theories fade away." We all missed him.

That summer, having reached required administrative retirement age, Dr. Shapley stepped down as Director of the Harvard College Observatory, and the end of a stimulating and productive

era came to an abrupt close. Jocelyn Gill reported on the following meeting, October 1953, Vol. 5, No. 11, page 1:

This last meeting to be held with the full cooperation of the Harvard Observatory, the institution which had fostered the growth of the Association for over 40 years, encompassed more anxieties and more high lights than previous meetings... An unusual feature of the Friday afternoon Council meeting was the address of Dean McGeorge Bundy of Harvard Arts and Sciences, who had the task of relaying the decision of the Harvard Corporation with special regard to the Pickering Memorial Fund and the AAVSO relation to it.....Previous to Dean Bundy's remarks, the Council meeting had opened on a note of impending financial crisis and this situation was clarified, if not alleviated, by the Dean's statement, and also during the question period following the talk. The Council was duly informed that the Association will have, to carry to its new home, only the interest on the original portion* of the Pickering Memorial Fund raised by AAVSO members.

This was a painfully anti-climactic ending to Shapley's era, and it contributed much sadness to his first years of retirement. The spirit of mutual helpfulness and cooperation he had helped to engender in the membership conquered the handicaps: the dark clouds that hovered so threateningly over the AAVSO in late 1953 gradually passed. Now the Association is stronger, more vigorous than ever before. Let us ponder forever the apt motto Shapley had facetiously provided us:

GOOD OBSERVATIONS NEVER DIE.

* Interest on only some \$6000.