

5 June 1959

Dr. Graham DuShane, Editor  
SCIENCE  
1515 Massachusetts Avenue, N.W.  
Washington 5, D. C.

Dear Dr. DuShane:

I am still feeling troubled about the poor quality of the refereeing of articles submitted to SCIENCE. We have already had some conversations by telephone about the article by Dr. Finkel, who could have benefitted by some editorial advice (although I judge that it might not have helped her much). What I am writing about now is my paper on Genetic and Somatic Effects of Carbon-14, published, after long delay, on 14 November 1958. The point that I want to make is that it now seems clear that your referee was pretty poor. In your letter of 22 July 1958 to me you quote the following sentence from him "Thus Pauling's arithmetic is quite correct if you permit him to assume this fantastically exaggerated rate of 30 megatons of testing annually." He suggested that the period of large testing should be the six years 1952 to 1958.

I replied, in my letter of 18 August 1958, that I was sure that my estimate of 30 megatons of testing per year was not fantastically exaggerated, although I had to base my estimate on bits of published information, and that perhaps 20 megatons was closer to the truth.

Now we know what the truth is, and it turns out that your advisor was completely wrong—the actual rate for the six years was 30 megatons per year, average. In the testimony of A.E.C. representatives before the Hollifield committee last month the figures were given: 175 megatons of fission plus fusion for the bomb tests to date (92 megatons of fission), with almost all of it in the period 1952 to 1958. Instead of being fantastically exaggerated, my estimate, based on very little information, was almost exactly right.

Your advisor wrote as though he were an authority on the subject, knowing the facts. I did not know the facts. If your advisor was an authority, he misled you and me. If he was not an authority, he seems to have posed as one.

I am writing this letter to you just for your information. I judge that you find it very difficult to get good referees for the articles submitted to SCIENCE, and this letter is designed to point out that there is one advisor that you might well not use in the future.

With best regards, I am

Sincerely yours,

Dictated by Professor Pauling  
Signed in his absence:lh