

L.H.W. Cooper

7th. October 1947.

Dear Cooper,

Thanks for your letter and note, which I am returning herewith. I think you state your point most temperately and that there is in statistical work, and for a number of different reasons, a constant need to check the tendency to "round off" the results of calculation.

A fairly striking instance is supplied by Karl Pearson, who certainly did not stint himself when he wanted space for publication. Yet in his celebrated paper, 1900, in which he introduced the χ^2 test

of goodness of fit, many of his examples are grossly in error through the calculations of numbers expected in different classes being given in whole numbers, or perhaps tenths of a unit, whereas three decimal places would be needed for making the test correctly. This is a fairly clear example because no-one could possibly imagine that the sampling error of the number observed in any class is not at least several units, and so of much greater magnitude than the computational errors which are sufficient completely to vitiate the test.

Yours sincerely,