

March 7, 1938

Dear Jeffreys,

Many thanks for your interesting letter. I am very glad you like "The Design of Experiments", as I had been concerned for some years previously with the kinds of logical difficulties that experimenters run into, and found it interesting and enjoyable to try and make an orderly statement of what can be done about them, putting the various dodges which have proved successful into their proper relations with each other. I was very glad to see the proof of the note in the Proceedings.

On your last point about identification of a prior probability with a frequency in the external world, I think I was quite a little influenced by Bayes, who, you may remember, defined probability as "the ratio of the expectation to the value expected", and clearly regards expectation as a value averaged over objective frequencies of occurrence. I have always thought that this point of view must have been fairly widely spread in the 18th century, as it is the natural one for gamblers to take for such problems as evaluating expectations on unfinished games, but I do not know

anyone who has brought it out so explicitly as Bayes.

Yours sincerely,