

October 11, 1938

Dear Jeffreys,

I find I have left your letter of September 30 unanswered. My position about inverse probability is as follows: the term has been used, not always for quite the same thing, during the last 150 years, but fairly consistently to designate Laplace's extension of Bayes' method based on the concept of "equal possibility", which I submit was used by Laplace merely to introduce a postulate of equal probability by a verbal subterfuge. A series of writers, notably in England Boole, ~~Mann~~ and Chrystal, protested at different times against this hidden postulate, and even orthodox exponents, such as de Morgan, were evidently shaken in their faith by the arbitrary way in which the postulate was sometimes applied.

During the 17th and 18th centuries I think that mathematical probability was used consistently as a means of expressing expected frequency, but in the course of the controversy aroused by Laplace's doctrine a psychological view, expressed in Keynes's phrase

"degree of rational relief", came to be advocated.

The opinion I express in "Statistical Methods" is, I think, quite clearly intended to refer to this old controversy, and not to the recent Cambridge work you refer to. I could, of course, in later editions - though I am afraid not in the 7th - add a sentence to say that I was not in particular discussing your theory of scientific inference, or your later work; but I really do not think that anyone yet has taken it to be so, but has only drawn the obvious inference that you were attempting a resolution of the old enigma of a different kind from mine.

Yours sincerely,