19 May 1943

Dear Bliss,

I have just received your full letter of March 24th. The censor seems to have deleted nothing. I hope you will by now have had Oliver & Boyd's reaction to your request. I do not know whether there is now an official agent for the United States.

I have looked again at the workings in Example 13·1, to which you refer. The statement in the middle of page 93 (in the eighth edition), " the probability of exceeding such a deviation in the right direction is about 1 in 6500", is correct, i.e. 1 in 6500 deviations of a normal distributions have a positive value exceeding 3·61, while another one part in 6500 will show negative deviations beyond $-3\frac{1}{2}61$.

In this example I have worked the odds for a deviation in one direction only, consistently for each method. The reason why I think the single tail is logically appropriate in this case is that, whereas a higher proportion of convicted among the monozygotic twins of criminals is intelligible on the view that criminality is influenced by genotype, the opposite conclusion that more of the monozygotic twins of criminals have been convicted would not be intelligible, or at least would not correspond with any view of the nature of things which has been brought into the discussion, for those who think that environment is all-important in such matters would expect a high

prpportion of criminality in both cases.

If I wanted a test using two tails in a case where the x^2 approximations are not sufficiently accurate, I should calculate the ~~actual~~ probability by the exact method for one tail and then double the probability.   The second half so included is indeed conventional for it corresponds with no real frequency-series in the other tail, save in symmetrical cases. It merely means that if the observations had fallen in the other tail, we should have calculated the probability on that side and doubled that.

We are having a perfectly glorious patch of May weather, so that even if you were in California(which you are'nt) I would not envy you.

Yours sincerely.