

Oct 26-22

Cripps's Corner. Forest Row. Sussex

Dear Fisher.

I am writing this letter without too much thought, and mainly for my own amusement. So don't feel the least bound to reply or acknowledge. I don't pretend to follow your last paper except in outline, as I am stupid about mathematical things. But it confirms my feeling that there is a good deal of mathematical work to be done about selection. The problem I have for the moment in my mind is, I fear, too vague for attack. You know that useless characters are a stumbling block in my mind - as they were to my father's. I gather that you think their similarity is due to correlation with useful characters. Would it be any use calculating the degree of correlation between a useful and a useless character so as to allow for a given degree of difference in variability? I admit this is all very vague. But I could conceive that you might get some rough idea of the probability of the correlation explanation being

right or wrong.

Is there anything in the following thought? The argument is that the useless character is kept in bounds as regards variability, by correlation with the useful. The fish's eye in the dark caves becomes useless, and disappears. Here correlation does not keep it from varying. I see there are lots of room for explanation.

Now on another subject - twins. I am sorry to say Dr. Davenport did not agree with your explanation, though this is hardly fair to say so, because he owned he had thought about it but little. Twinning is inherited equally, he said, on both sides; and your explanation, he thought, would hardly fit in with this fact. He also had some other objection, which I did not understand. Now can you get an explanation nearly like yours, but getting over these difficulties? Supposing all the eggs which formed the animals belonging to one litter were like identical twins, and the different eggs were

fertilized by different spermatozoa,
would not you get your results? Is
~~the~~ such an hypothesis possible?

He said, if I understood him,
that the percentage of twins rose with
fecundity. If so the percentage of twins
might form a valuable test of real
differences in fecundity between classes.
But I confess I did not quite
understand him.

Guess you have had enough
your money?

J. Dawson