

Oct. 23 1915

100-5000 PAGE.

S.W.

Dear Fisher

Herewith my notes. I suppose all about fluctuations, or nearly all, will come out. In fact a good bit of the first 8 pages won't hold water. But that illustrates how your conclusions will simplify matters.

I have dealt with certain quasi-mathematical matters in this paper, and as <sub>it</sub> is <sup>the</sup> impressionist method, I am here especially likely to come to grief.

I do not like my suggested definitions on second thoughts. We want the ordinary words to be used for the ideas in most common use. Large mutations will, I believe, figure but little in the future, & I don't therefore want 'mutation' only to mean a large change. How will the following do?

Modifications are differences between individuals which would not have existed if they had been exposed to it

similar environments.

Mutations are differences between parents and offspring which are due to changes in the <sup>Mendelian factors</sup> germ plasma, generally of a permanent nature.

Fluctuations are differences in the members of a sibship due to different arrangements in the Mendelian factors.

Variations comprise all differences between the individuals of the same species.

I don't know that

you will agree that you  
are dealing with  
fluctuations! It is  
difficult to get the  
definitions to run  
freely.

Yours sincerely

L. Darwin

Possibly enclosed from you  
will interest you. Kindly  
return. Do you see Pearson has  
republished his Cambridge Press  
that article in Biometrika -  
the one in question? He is a  
strange being. Whether correlati-  
on coefficients are a <sup>measure</sup> of the relative  
amount of attention to be  
paid to different questions is an  
important matter, about which  
Statisticians seem extraordinarily  
uncertain!