

21st November, 1955.

My dear Donald,

As you may guess I have been a good deal troubled and puzzled by such tendencies in transatlantic statistical circles as is represented by Wald's **D**ecision functions, but it was only in discussing various aspects of it with George Barnard at Imperial College that I began to realize that Neyman and Pearson's approach, from which Wald's is derived, was only possible to people with no idea of how in fact scientific inferences are made, and who thought that a test of significance, perhaps the most characteristic tool of scientific research, could be equated to a simple, necessary, but rather low level part of the apparatus of technology.

Of course the contrast cannot be made sharply for these terms, for in fact technological work in medicine and agriculture as well as engineering is pervaded and riddled through and through with scientific questions, that is to say that fact finding or the verification of provisional hypotheses thrown up from time to time for our guidance in deciding what to do next with a technological problem, and that though we may, and often