

June 14th., [192] 7.

Dear Major Darwin,

This is a heavy business about Stevenson, I wish he could have thought the paper over a little more before replying; but of course he must be very busy.

The measure of growth to be preferred to the expectation of sons, is of course, the Malthusian rate of compound interest.

I had expressed myself very superficially about the condition in which the expectation of sons is "at or very near to unity", though the context and the clause underlined should have avoided Stevenson's criticisms. The point is that the expectation of sons could be used in conjunction with the length of the generation, if the growth or decrease in a generation were quite small, but, if not, the expectation of sons must be discarded in favour of an exact calculation of the Malthusian compound interest from the original data. I have altered the passage, and am glad to have had the comment, though I now have to go into details which I had meant to leave to the algebra.

One advantage of the more sharply defined reproductive ages of women is merely that the errors of sampling are diminished, but I doubt if I could get this idea across to the G.R. Office. On the other hand it may be that misstatements of female ages in this region are important and troublesome. I cannot help feeling that we ought not to

base regional comparisons wholly on men, if the same quantities estimated from the women are going to give different results. The differences found would be exceedingly interesting, and perhaps important in view of the inclusion^(s) of illegitimate births, and the effects of war losses, though they will certainly be difficult to interpret. I think we ought to know and not to guess how large or small these effects are.

I was not altogether surprised at my error on page 8, as I have never tried to base any calculations on official returns in this country without finding some essential point missing. The comparison needed to check the conclusions drawn by Stevenson from the 1911 Census can evidently only be made for the group of wives past reproduction in 1911, and this makes it doubly important that the question was omitted in 1921, though I do not see that it makes it useless in 1931, since there must be many widows or wives over 70.

If, in addition, the dates of birth, or ages at Census, of children were recorded in 1931, comparisons of the totals up to the Census of 1911 would be possible for all age groups. And this should do much to aid in the interpretation of the results obtained for the older age groups in 1911.

If only total children is ^{the only} a possible question in 1931, I am inclined to despair of utilising Census material to any purpose. The history of fertility for the last two generations could be salvaged by the suggested questions at death registration, and I cannot think that Stevenson has yet considered this seriously. He seems to speak of it as alternative to the ages of parents at birth registration, which it will not be far about 70 years!

Surely the ages of children at the death of the parent is not irrelevant to Widowhood insurance, though, of course, we want ages of all and not merely dependent children.

I enclose the memo revised. I shall want this copy to work over the proofs with.

Yours sincerely,