November 29, 1941

Dear Riddell,

Thanks for your letter. I do not think I can let you off these spots as things which probably come into being, or grow into visibility during life. In order to put the thing on an objective basis, and to supply material for observing any other relevant contrasts, I have, ignoring the 21 colours with only a single representative, and the four colours with only two, arranged the remaining 36 colours recorded in order of masculinity, or, if you like, of juvenility.

In order to do this I first made an estimate from the data of the time interval between corresponding changes in males and females, and found it to be 31 years, so that the order presented is that of mean age when 31 years is subtracted from the age recorded for all males, or added to the age recorded for all females. Of the 36 classes so arranged, you will notice that the last 18, with two exceptions, show spots, while only 6 of the first 18 do so. It seems that green and gray with diffuse yellow are fairly mature colours, even without spots, while blue with diffuse yellow is juvenile.

The existence of the two big classes, plain blue and plain gray, with both sex ratio and age nearly central, ~~rathengly~~

rather strongly suggests to me that these represent a genotype, or group of genotypes, which does not change with age.

At present I think I must guess that chocolate coming early in the series is something of an accident, for I do not know what it could change into, chocolate with diffuse green being at best central rather than late, and nearly all the tan groups being also early. Do you think - the question is not rhetorical -- that eyes chocolate in early life could appear green or gray with diffuse yellow or tan and chocolate spots in later years?

I believe this last list represents the last drop of juice I can squeeze out of the data at present. The whole idea of progressive changes in the iris in middle life is one that I have never before taken seriously.

Yours sincerely,