

though the change that resulted was not, of course, one that was not in a sense implicit in the reproductive cells, it was none the less an alteration of the natural bias. Similarly, it is *possible* that very decisive functional and environmental modifications may saturate deeply into the organism, and affect the reproductive cells in such a definite manner that a tendency to change in the same direction may be transmitted to the offspring. But, as we have said, it is not justifiable at present to admit more than a possibility, and science does not deal with possibilities.

In his work entitled *Natural Inheritance* Galton was led by statistical methods to a very important generalization, which from one of its aspects may be called *the law of filial regression*.

A strange regularity is observable in the peculiarities of large populations throughout a series of generations. "The large do not always beget the large, nor the small the small; but yet the observed proportion between the large and the small, in each degree of size and in every quality, hardly varies from one generation to another." A specific average is sustained. And this is not because each individual leaves his like behind him, for this is obviously not the case. It is rather due to the fact of a regular regression which brings the offspring of extraordinary parents in a definite ratio nearer the average of the stock.

"However paradoxical it may appear at first sight, it is theoretically a necessary fact, and one that is clearly confirmed by observation, that the stature of the adult offspring must on the whole be more mediocre than the stature of their parents—that is to say, more near to the median stature of the general population. Each peculiarity of a man is shared by his kinsmen, but *on an average* in a less degree. It is reduced to a definite fraction of its amount, quite independently of what its amount might be. The fraction differs in different orders of kinship, becoming smaller as they are more remote."

As it is easy to misunderstand this important generalization, let us give some further illustration. It does