

"correlation of parts," had been already set forth by Goethe, by Geoffroy St. Hilaire, and other nature-philosophers. It rests mainly upon the fact that direct or actual adaptation cannot produce an important change in a single part of the body, without at the same time affecting the whole organism.

The correlative adaptation between the reproductive organs and the other parts of the body deserves a very special consideration, because it is, above all others, likely to throw light upon the obscure and mysterious phenomena of indirect or potential adaptation, which have already been considered. For just as every change of the sexual organs powerfully reacts upon the rest of the body, so on the other hand every important change in another part of the body must necessarily more or less react on the sexual organs. This reaction, however, will only become perceptible in the formation of the offspring which arise out of the changed generative parts. It is, in fact, precisely those remarkable and imperceptible changes of the genital system (in themselves utterly insignificant changes)—changes of the eggs and the sperm—brought about by such correlations, which have the greatest influence upon the formation of the offspring, and all the phenomena of indirect or potential adaptation previously mentioned may in the end be traced to correlative adaptation.

A further series of remarkable examples of correlative adaptation is furnished by the different animals and plants which become degenerated through parasitic life or parasitism. No other change in the mode of life so much affects the shapes of organisms as the adoption of a parasitical life. Plants thereby lose their green leaves; as, for instance, our native parasitical plants, *Orobanche*,