external stimulus, every contact with the outer surroundings, is an insult, necessarily of detrimental effect, as it disturbs the equilibrium of the cell body. It must, therefore, be of advantage to the cells' well-being to return as soon as possible to the status quo ante, and this can only be done by increased activity.

In the present state of our knowledge, we can approach only the simplest cases of acquisition of characteristics. Mostly they are so complicated, subject to so many unthought-of conditions, that we do not know from which end to approach the problem. Frequently the supposed use of certain obvious features is the merest guesswork. This applies especially to features to which we are not accustomed (although wrongly so) to assign a function—for example, coloration. A green tree-frog will with predilection rest on green leaves. The advantages of concealment are obvious, and in this case he 'adapts himself' to the surroundings by