those which have been inherited, or, in other words, those which have been transmitted to it from its parents or ancestors. On the other hand, we call Adaptability (Adaptabilitas), or Variability (Variabilitas), the capability inherent in all organisms to acquire such new qualities under the influence of the outer world.

The undeniable fact of organic adaptation or variation is universally known, and can be observed at every moment in thousands of phenomena surrounding us. But just because the phenomena of variation by external influences appear so self-evident, they have hitherto undergone scarcely any accurate scientific investigation. To them belong all the phenomena which we look upon as the results of contracting and giving up habits, of practice and giving up practices, or as the results of training, of education, of acclimatization, of gymnastics, etc. Many permanent variations brought about by causes producing disease, that is to say, many diseases, are nothing but dangerous adaptations of the organism to injurious conditions of life. In the case of cultivated plants and domestic animals, variation is so striking and powerful that the breeder of animals and the gardener have founded their whole mode of procedure upon it, or rather upon the interaction between these phenomena and those of Inheritance. It is also well known to every one that animals and plants, in their wild state, are subject to variation. Every systematic treatise on a group of animals or plants, if it were to be quite complete and exhaustive, ought to mention in every individual species the number of variations which differ more or less from the prevailing or typical form of the species. Indeed, in every careful systematic special treatise one finds, in the