

developed in him than in the apes most like men. This differentiation of the fore and hinder extremities was, however, not merely most advantageous for their own development and perfecting, but it was followed at the same time by a whole series of very important changes in other parts of the body. The whole vertebral column, and more especially the girdle of the pelvis and shoulders, as also the muscles belonging to them, thereby experienced those changes which distinguish the human body from that of the most man-like apes. These transmutations were probably accomplished long before the origin of articulate speech; and the human race thus existed for long, with an upright walk and the characteristic human form of body connected with it, before the actual development of human language, which would have completed the second and the more important part of human development. We may therefore distinguish a special (21st) stage in the series of our human ancestors, namely, Speechless Man (Alalus), or Ape-man (Pithecanthropus), whose body was indeed formed exactly like that of Man in all essential characteristics, but who did not as yet possess articulate speech.

The origin of *articulate language*, and the *higher differentiation and perfecting of the larynx* connected with it, must be looked upon as only a later, and the most important stage in the process of the development of Man. It was, doubtless, this process which above all others helped to create the deep chasm between man and animal, and which also first caused the most important progress in the mental activity and the perfecting of the brain connected with it. There indeed exists in very many