events or biographies, it has been gradually united and organised as a whole, largely through the same judicial sifting of manifold evidence and elaboration of critical methods of research. Of this I hope to treat in a different portion of this work: here I only wish to draw attention to the enlarged aspect, which in both instances has, through the same process of development, come over our studies. When once we rise from the contemplation and examination of details and single facts, and grasp the connection and economy of the whole as a subject worthy of special attention, we involuntarily introduce two new elements into our research—the element of conjecture and the element of speculation. The former is needed to fill up the many gaps which we find in the actual records when we wish to string them together into a united and intelligible whole; the latter is the inquiry into the general principles which underlie any and every development of the kind we have in view. The creation by Darwin of the science and history of nature, as distinguished from the science and history of natural objects and single processes, has been accompanied and strengthened by the appearance of conjectural and speculative attempts; just as the cultivation of the science of general history has gone hand in hand with, and has been supported by, the brilliant results of philological conjecture and the philosophy of history.[1] Of

41. Genetic view on a large scale.

[1] In an eloquent passage Professor Parker compares the work of the naturalist of to-day with that of the philologist. This passage occurs in his Memoir on the Fowl (1868), and is quoted in his book 'On the Morphology of the Skull' (by Parker and Bettany, London, 1877, p. 362): "Whilst at work I seemed to myself to have been endeavouring to decipher a palimpsest, and one not erased and written upon again just once but five or six times over. Having erased, as it were, the characters of the culminating type —those of the gaudy Indian bird