

passed over in a history of Thought. Moreover, it has made itself felt by giving rise to two separate views of the cause of variation—*i.e.*, of that phenomenon in the living creation on which the entire modern theory of descent is founded.

If it be true that the preservation of the species, the continuity of living forms, is dependent on the germ-plasma, whereas the somatic plasma, from this point of view, only serves individual ends and is a receptacle or temporary dwelling-place for the germs which it transmits but does not create, the experiences of the body, its changes and development, can have little or no influence on the hidden germs and their further history. Thus Weismann is led to a denial of the influence of environment, of habit and acquired characters, except in those cases where, as in the lower organisms, no differentiation has set in between the germinal and the personal substance. This amounts to a negation of those modifying influences which Lamarck emphasised, and which play such a great part in the theories elaborated by Darwin, Haeckel, and especially by Herbert Spencer. On the other side, it has led Weismann to lay a much greater weight upon sexual selection and the effects of crossing in the process of descent and the phenomena of heredity. But for sexual selection, and the endless combinations of different germ-plasmas, there would, according to Weismann, be no variation, and hence no development of the higher forms of life. The controversy turns mainly upon the inheritance of acquired characters, of which indeed no genuine and authenti-

56.  
Weismann v.  
Lamarck.